LIST OF PUBLICATIONS

DEPARTMENT		TOTAL
INFORMATION TECHNOLOGY	JOURNALS = 74 CONFERENCES = 212	286
CEGESS	JOURNALS =28 CONFERENCE=36 PATENT=1	65
COMPUTER SCIENCE AND TECHNOLOGY	PUBLICATIONS=163	163
CHEMISTRY	PUBLICATIONS=217 BOOK CHAPTER=2	219
CIVIL ENGINEERING	JOURNAL PUBLICATIONS=116 CONFERENCE=98 BOOK CHAPTER=4	218
MINING ENGINEERING	JOURNAL=15 SEMINARS=6	21
PHYSICS	JOURNALS=72 CONFERENCE=68 PATENT=1	141
ELECTRONICS & TELECOMM. ENGINEERING	JOURNALS=107 CONFERENCE=36 PATENTS=5	148
AEROSPACE ENGINEERING AND APPLIED MECHANICS	JOURNALS=137 CONFERENCES=116	253
SCHOOL OF VLSI	PUBLICATIONS=28 CONFERENCE=39 BOOKS=3 PATENTS=2	72

ARCHITECTURE, TOWN AND REGIONAL PLANNING	JOURNALS=52 CONFERENCE=68 BOOKS=12 TECHNICAL REPORTS=19 PATENTS=2	153
SCHOOL OF MECHATRONICS & ROBOTICS	JOURNALS=7 CONFERENCES=33 PATENT=2 BOOK CHAPTER=6	48
Electrical Engineering	Publications=52 Conference= 120 Books = 2 Patents= 3	177
TOTAL =1964		

INFORMATION TECHNOLOGY

List of Publications

Journal Papers/Edited Volumes

- Arighna Deb, Debesh K. Das, Hafizur Rahaman, Robert Wille, Rolf Drechsler, Bhargab B. Bhattacharya, Reversible Synthesis of Symmetric Functions with a Simple Regular Structure and Easy Testability", ACM Journal on Emerging Technologies in Computing Systems (JETC) 2016 (Accepted). [Impact Factor= 0.729, Citations= 0]
- Pranab Roy, Swati Saha, and Hafizur Rahaman, "Novel Wire Planning Schemes for Pin Minimization in Digital Microfluidic Biochips", IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016. (Accepted), [Impact Factor= 1.356, Citations= 0]
- 3. Sandip Bhattacharya, Debaprasad Das and Hafizur Rahaman,"Reduced Thickness Interconnect Model using GNR to Avoid Crosstalk Effects", Journal of Computational Electronics (JCEL) 2016, Springer Publication, DOI: 10.1007/s10825-016-0794-5,[Impact Factor= 1.520, Citations= 0]
- 4. Soumyajit Poddar, Prasun Ghosal, and Hafizur Rahaman, "Design of a High Performance CDMA Based Broadcast Free Photonic Multi Core Network on Chip", ACM Transactions on Embedded Computing Systems, Volume 15, Issue 1, January 2016, Article No.(2), DOI:-10.1145/2839301,[Impact Factor= 0.471, Citations= 0]
- Debaprasad Das and Hafizur Rahaman, "Investigating the Applicability of Graphene Nanoribbon asSignal and Power Interconnects for Nanometer Designs", Journal of Circuits, Systems, and Computers (JCSC), World Scientific, Vol. 25, No. 2 (2016), pp-1-14, DOI: 10.1142/S0218126616500018, [Impact Factor= 0.25, Citations= 0]
- Kamalika Datta, Indranil Sengupta, and Hafizur Rahaman, "A Post-Synthesis Optimization Technique Reversible Circuits Exploiting Negative Control Lines", IEEE Transactions on Computers2015, vol. 64(4), pp.1208-1214, DOI: 10.1109/TC.2014.2315641, [Impact Factor= 1.659, Citations=2].
- Surajit Roy, Chandan Giri, and Hafizur Rahaman, "Optimization of Test Architecture in 3D Stacked ICs for Partial Stack/Complete Stack using Hard SOCs", IEE Computers and Digital Techniques 2015, vol.9(5), pp. 268-274 (2015), [Impact Factor= 0.356, Citations= 0]
- Santi P. Maity and Sumanta Hati, On Optimization of CI/MC-CDMA System through Channel Estimation, Wireless Personal Communications Journal, Springer Verlag vo. 85, n.o. 4, 2333-2354 (2015) (IF:0.653). (Citation:0)
- Subhankar Chatterjee, Santi P. Maity and Tamaghna Acharya, "On Optimal Threshold Selection in Cooperative Spectrum Sensing for Cognitive Radio Networks- an Energy Detection Approach using Fuzzy Entropy Maximization", Special Issue in Journal of Wireless Personal Communication, Springer 84(3): 1605-1625 (2015) (IF:0.653). (Citation: 1)

- Tamaghna Acharya, Santi P. Maity and Swagata Mandal, "Outage Minimized Joint Power and Channel Allocation in Multihop Cognitive Radio Networks: A Lifetime-Centric Approach" Journal of Wireless Personal Communication, Springer, 83(4): 2519-2537 (2015) (IF:0.653). (Citation:0)
- 11. Santi P. Maity and Hirak Maity, On Adaptive Distortion Control in Reversible Watermarking using Modified Reversible Contrast Mapping, Multimedia Tools and Applications, Springer, DOI 10.1007/s1-1042 015-2710-6 (IF:1.346) (Citation:0)
- 12. Sudip Ghsoh, Arijit Biswas, Santi P. Maity, and Hafizur Rahaman, FPGA and SoC Based Implementation of DFWHT Domain Image Watermarking Architecture for Real-Time Applications, Journal of Low Power Electronics, American Scientific Publisher, Vol. 11, No. 3, pp. 375-386 September, 2015 (IF:0.526) (Citation:0)
- Sudeshna Sil Kar and Santi P. Maity, Retinal Blood Vessel Extraction and Optic Disc Removal using Curvelet Transform and Morphological Operation, Advs in Intelligent Syst., Computing, Vol. 390, Richa Singh et al. (Eds): Machine Intelligence and Signal Processing, 978-81-322-2624-6, 334847_1_En, (14)
- 14. N. Karmakar, A. Biswas, and P. Bhowmick. Reeb Graph based Segmentation of Articulated Componentsof 3D Digital Objects. Theoretical Computer Science, 624: 25-40, 2015, DOI: , (Impact Factor: 0.657) [Citations: 0]
- Bera, S., A. Biswas, and B. B. Bhattacharya. A Fast and Automated Granulometric Image AnalysisBased on Digital Geometry. Fundamentalnformaticae, 138, 321-338, 2015, DOI: 10.3233/FI-2015-1214 (Impact Factor: 0.717) [Citations: 0]
- 16. Indrajit Pan and Tuhina Samanta, An Advanced Strategy for Droplet Routing in Digital Microfluidic Biochip using Ant Colony Optimization, "Handbook of Research on Swarm Intelligence in Engineering." Publisher Name: IGI Global, Pennsylvania 17033-1240, USA, 2015.
- 17. Subhamita Mukherjee, Tuhina Samanta, "Distributed Scan Like Fault Detection and Test Optimization for Digital Microfluidic Biochips", Journal of Electronic Testing: Theory and Applications (Springer Verlag), Volume 31(3), June 2015, pages: 311 319. (Citation 1) IF 0.519
- 18. Prasun Ghosal, Subha Koley, "Hardware / Software Realization of IoT Architectures: Prospects and Challenges", in Handbook of Research on Advanced Wireless Sensor Network Applications, Protocols, and Architectures, Editors Niranjan Ray and Ashok Kumar Turuk, IGI-Global [Accepted, Manuscript under preparation, 2015 (to be published)].
- 19. Prasun Ghosal, Tuhin Subhra Das, Soumyajit Poddar, Munshi Mostafijur Rahaman, Avik Bose, "3D NoC: A Promising Alternative for Tomorrow's Nanosystem Design", in Nano-CMOS and Post-CMOS Electronics: Circuits and Design, Edited by S. P. Mohanty and A. Srivastava, The Institute of Engineering and Technology (IET), 2016, ISBN: XXX.
- 20. Prasun Ghosal, Mayukh Sarkar, Pratima Chatterjee, "A New Paradigm towards Performance Centric Computation beyond CMOS: DNA Computing", in Nano-CMOS and Post-CMOS Electronics: Circuits and Design, Edited by S. P. Mohanty and A. Srivastava, The Institute of Engineering and Technology (IET), 2016, ISBN: XXX.
- Debashri Roy, Prasun Ghosal, and Saraju Mohanty, "FuzzRoute: A Thermally Efficient Congestion Free Global Routing Method for Three Dimensional Integrated Circuits", ACM Transactions on Design Automation of Electronic Systems (ACM TODAES), Volume 21 Issue 1, November 2015 I.F. 0.811.
- 22. PrasenjitChanak, Indrajit Banerjee, "Fuzzy rule-based faulty node classification and management scheme for large scale wireless sensor networks", Expert Systems with Applications. DOI:10.1016/j.eswa.2015.09.040 (In Press)
- 23. Nimisha Ghosh, Indrajit Banerjee, "An Energy-Efficient Path Determination Strategy for Mobile Data Collectors in Wireless Sensor Network", Computer and Electrical Engineering (CAEE), DOI: 10.1016/j.compeleceng.2015.09.004. (In Press).

- 24. PrasenjitChanak, Indrajit Banerjee, and R. S. Sherratt, "Simultaneous Mobile Sink Allocation in Home Environments with Applications in Mobile Consumer Robotics," IEEE Transaction on Consumer Electronics, vol.61, no.2, pp 181-188, 2015. DOI: 10.1109/TCE.2015.7150572.
- 25. PrasenjitChanak, Indrajit Banerjee, HafizurRahaman, "Load Management Police for Energy Holes Reduction in Wireless Sensor Networks," Journal of Computers & Electrical Engineering. DOI:10.1016/j.compeleceng.2015.05.013. (In press).
- 26. Suman Bhowmik and Chandan Giri, "A Fuzzy Communication Model of Sensor Nodes in Wireless Sensor Network", in Intl. Journal of Sensor Network, Inderscience, 2015.
- 27. M. Bhattacharyya, J. Nath and S. Bandyopadhyay, MicroRNA Signatures Highlight New Breast Cancer Subtypes, Gene, 556(2):192-198, 2015, DOI: 10.1016/j.gene.2014.11.053. (Impact Factor: 2.138) [Citations: 8]
- M. Bhattacharyya and S. Bandyopadhyay, Finding Quasi Core with Simulated Stacked Neural Networks, Information Sciences, 294:1-14, 2015, DOI: 10.1016/j.ins.2014.09.032. (Impact Factor: 4.038) [Citations: 0]

- 29. Sudip Ghosh, Arijit Biswas, Santi Prasad Maity and Hafizur Rahaman, "FPGA and SoC Based Implementation of DFWHT Domain Image Watermarking Architecture for Real-Time Applications", Journal of Low Power Electronics (JOLPE), American Scientific Publishers, Vol. 11 No. 3, pp.375-386, [Impact Factor= 0.526, Citations= 0]
- 30. Manodipan Sahoo, Prasun Ghosal and, Hafizur Rahaman, "Modeling and Analysis of Cross talk Induced Effects in Multiwalled Carbon Nanotube Bundle Interconnects: An ABCD Parameter Based Approach", IEEE Transactions on Nanotechnology, March 2015, Vol.14, Issue: 2 pp. 1-16, DOI: 10.1109/TNANO.2014.2388252, [Impact Factor= 1.825, Citations=0]
- 31. Debasis Mitra, Sarmishtha Ghoshal, Hafizur Rahaman, Krishnendu Chakrabarty, and Bhargab B. Bhattacharya, "Automated Washing Schemes for Residue Removal in Digital Microfluidic Biochips to Enhance Reliability", ACM Transactions on Design Automation of Electronic Systems, 21(1): 17 (2015). [Impact Factor= 0.686, Citations=0]
- 32. Manodipan Sahoo and Hafizur Rahaman, "Modeling of Crosstalk Induced Effects in Copper Based Nano-Interconnects: An ABCD Parameter Matrix Based Approach", Journal of Circuits, Systems, and Computers, Vol. 24, No. 2 (2015) 1540007, World Scientific Publishing Company, DOI: 10.1142/S0218126615400071, (With PhD Student). [Impact Factor= 0.25, Citations=2]
- 33. Prasenjit Chanak, Indrajit Banerjee andHafizur Rahaman, "Load management scheme for energy holes reduction in wireless sensor networks", Journal of Computers & Electrical Engineering (Elsevier), 48: 343-357 (2015). [Impact Factor= 0.817, Citations=0]
- Subhankar Chatterjee, Santi P. Maity and Tamaghna Acharya, "Energy Efficient Cognitive Radio System for Joint Spectrum Sensing and Data Transmission", Special Issue: Microwatts Wireless Technologies on IEEE Journal on Emerging and Selected Topics in Circuits and Systems Vol. 4, No. 3, September 2014, pp. 292-300 (IF:1.524). (Citation:16)
- 35. Subhankar Chatterjee, Tamaghna Acharya, and Santi P. Maity, "On Optimized Decode and Forward Relay Assisted CR System Design for Throughput Maximization", Journal of Digital Signal Processing, Elsevier, Vol. 34, November 2014, pp. 92-100 (IF:1.256) (Citation: 1)

- 36. Hirak Maity and Santi P. Maity, FPGA Implementation of Reversible Watermarking in Digital Images using Reversible Contrast Mapping, Journal of Systems and Software, Elsevier Science, Vol. 96. October 2014, pp.93-104. (IF:1.352). (Citation: 2)
- 37. Santi P. Maity, Seba Maity, Jaya Sil and Claude Delpha "Perceptually adaptive MC-SS image watermarking using GA-NN Hybridization in Fading Gain", Special issue on Journal Engineering Applications of Artificial Intelligence, vol.31, pp.3-14, May, 2014. (IF:2.207) (Citation:3)
- 38. Santi P. Maity, Sumanta Hati and Chinmoy Maji, Optimal Power Allocation in DS-CDMA with Adaptive SIC Technique, Special issue, Springer Telecommunication System, Springer Verlag Volume 56, Issue 3 (2014), Page 335-346. (IF:0.705) (Citation:6)
- Dutt, M., A. Biswas, P. Bhowmick, and B. B. Bhattacharya. On the Family of Shortest IsotheticPathsin a Digital Object: An Algorithm with Applications. Computer Vision and Image Understanding, 129, 75-88, 2014, DOI: 10.1006/cviu.1995.1002. (Impact Factor: 1.848) [Citations: 1]
- 40. Dutt, M., A. Biswas, P. Bhowmick, and B. B. Bhattacharya. On Finding a Shortest Isothetic Path andits Monotonicity inside a Digital Object. Annals of Mathematics and Artificial Intelligence 75(1), 27-51, 2014. DOI:ISSN: 1012-2443, (Impact Factor: 0.691) [Citations: 2]
- 41. Mukherjee, A., U. Garain, and A.Biswas. Experimenting with Automatic Text-to-Diagram Conversion: A Novel Teaching Aid for the Blind People. Journal of Educational Technology and Society, 17(3), 40-53, 2014, DOI: (ISSN 1436-4522). (Impact Factor : 1.376) [Citations: 0]
- 42. Sukanta Das, Enrico Formenti, Jarkko Kari: Non-uniform Cellular Automata. Theor. Comput. Sci. Vol. 559 pp. 1-2, year 2014 (IF 0.657) (citation 1)
- 43. Mayukh Sarkar, Prasun Ghosal, and Saraju Mohanty, "Minimum Reversible Circuit Synthesis on a DNA Computer", Natural Computing, Springer, [Accepted] 2014 I.F. 0.757
- 44. PrasenjitChanak, Indrajit Banerjee, J. Wang, and R. S. Sherratt, "Obstacle Avoidance Routing Scheme through Optimal Sink Movement for Home Monitoring and Mobile Robotic Consumer Devices," IEEE Transaction on Consumer Electronics,2014, vol. 60 (4), pp. 596-606. DOI: 10.1109/TCE.2014.7027292.
- 45. Indrajit Banerjee, PrasenjitChanak, TuhinaSamanta, HafijurRahaman "EFDR: Effective Fault Detection and Routing Scheme for Wireless Sensor Network", Journal of Computers & Electrical Engineering, vol. 40, no. 2, pp. pp. 291-306, 2014, DOI:10.1016/j.compeleceng.2013.04.027.
- 46. P. Chatterjee, M. Bhattacharyya, S. Bandyopadhyay and D. Roy, Studying the System-level Involvement of MicroRNAs in Parkinson's Disease, PLoS ONE, 9(4):e93751, 2014, DOI: 10.1371/journal.pone.0093751. (Impact Factor: 3.234) [Citations: 4]

- 47. Kamalika Data, I.Sengupta, Hafizur Rahaman and Rolf Drechsler, "An Approach to Reversible Logic Synthesis using Input and Output Permutations", Springer Transactions on Computation Science XXIV, LNCS 8911, pp.1-8, 2014, (DOI:- 978-3-662-45710-8, 332808_1_En). [Impact Factor= NA, Citations=0]
- Chandan Bandyopadhyay, Hafizur Rahaman and Rolf Drechsler "Cube List based Cube Pairing Approach for Synthesis of ESOP based Reversible logic", Springer Transactions on Computational Science, XXIV, LNCS 8911, pp. 1–18, 2014, DOI: 10.1007/978-3-662-45711-5_8, [Impact Factor= NA, Citations=0]

- 49. Manodipan Sahoo, Hafizur Rahaman and Bhargab B.Bhattacharya, "On the Suitability of Single-Walled Carbon Nanotube Bundle Interconnects for High-Speed and Power Efficient Applications", Journal of Low Power Electronics, American Scientific Publishers, Vol. 10, No 3, pp. 479-494, September 2014, (DOI: 10.1166/jolpe.2014.1339). [Impact Factor= 0.526, Citations=0]
- 50. Manodipan Sahoo, Prasun Ghosal and Hafizur Rahaman, "Performance Modeling and Analysis of Carbon Nanotube Bundles for Future VLSI Circuit Applications", Journal of Computational Electronics, Springer Publication, pp.673-688, DOI 10.1007/s10825-014-0587-7, (With PhD Student). [Impact Factor= 1.520, Citations=2]
- 51. Kamalika Datta, Gaurav Rathi, Indranil Sengupta and Hafizur Rahaman, "An Improved Reversible Circuit Synthesis Approach using Clustering of ESOP Cubes", ACM Journal on Emerging Technologies in Computing Systems (JETC), 11(2):15(2014), (With PhD Student). [Impact Factor= 0.729, Citations=2]
- Kamalika Datta, Indranil Sengupta, and Hafizur Rahaman, "Exact Synthesis of Reversible Circuits using A* Algorithm", Journal of the Institution of Engineers (India): Series B, Springer publication, 2014, Volume 96, Issue 2, pp. 121-130, (DOI- 10.1007/S40031-014-0133-9), (With PhD Student). [Impact Factor= NA, Citations=0]
- Indrajit Banerjee, Prasenjit Chanak, Hafizur Rahaman, Tuhina Samanta, 'Effective fault detection and routing scheme for wireless sensor networks", Computers & Electrical Engineering (Elsevier), 40(2): 291-306 (2014) (With PhD Student). (DOI:10.1016/j.compeleceng.2013.04.027). [Impact Factor= 0.817, Citations=17]
- 54. Kamalika Datta, Indranil Sengupta, and Hafizur Rahaman, "A Particle Swarm Optimization based ReversibleCircuit Synthesis", Journal of Low Power Electronics, Vol. 9 No. 3, pp.363-372, October 2013, (DOI: http://dx.doi.org/10.1166/jolpe.2013.1261). [Impact Factor= 0.526, Citations=0]
- 55. Dipak K. Kole, Hafizur Rahaman, Debesh K. Das, and Bhargab B. Bhattacharya, "Derivation of Test Set for Detecting Multiple Missing-Gate Faults in Reversible Circuits", Computer and Electrical Engineering (Elsevier), vol.39 (2), pp. 225-236, 2013 (With PhD Student). (DOI:10.1016/j.compeleceng.2012.11.016). [Impact Factor= 0.817, Citations=0]
- 56. Indrajit Pan, Ritwik Mukherjee, Hafizur Rahaman, Tuhina Samanta, Parthasarathi Dasgupta, "Optimization algorithms for the design of digital microfluidic biochips: A survey", Computers & Electrical Engineering(Elsevier), 39(1): 112-121 (2013), 2013, (PhD. Student). (DOI:10.1016/j.compeleceng.2012.10.003). [Impact Factor= 0.817, Citations=2]
- 57. Santi P. Maity, Seba Maity, Jaya Sil, and Claude Delpha, Collusion resilient spread spectrum watermarking in M-band wavelets using GA-Fuzzy Hybridization, Journal of Systems and Software, Elsevier Science, vol. 86, no. 1, 47-59, 2013. (IF:1.352) (Citation:24)
- 58. Santi P. Maity and Malay K. Kundu, Distortion free image-in-image communication with implementation in FPGA, International Journal of Electronics and Communication Engineering., Elsevier, vol. 67, no. 5, pp. 438-447, 2013. (IF:0.601). (Citation: 2)
- 59. Santi P. Maity, Seba Maity, Jaya Sil and Claude Delpha, Optimized Spread spectrum watermarking for fading-like collusion attack with improved detection, Special Issue on Wireless Personal Communications Journal, Springer Verlag, vol. 72, no.3, pp. 1737-1753, 2013 . (IF:0.653) (Citation:4)
- 60. Tamaghna Acharya and Santi P. Maity, "Power Allocation in Cognitive Radio in Energy Constrained Wireless Ad Networks", IGI-CRN Book Chapter, Cognitive Radio Technology Applications for Wireless and Mobile Ad Hoc Networks Ed Natarajan Meghanathan & Yenumula B. Reddy, pp.248-270.
- Dutt, M., A. Biswas, and P. Bhowmick. Approximate Partitioning of 2D Objects into OrthogonallyConvex Components. Computer Vision and Image Understanding 117(4), 326-341, 2013. DOI: 10.1016/j.cviu.2012.08.017. (Impact Factor: 1.848) [Citations: 0]

- Partha Pratim Saha, and Tuhina Samanta, "Obstacle Avoiding Delay Equalization for Rectilinear Clock Tree Routing based on a Game Theoretic Approach" International Journal of Engineering and Innovative Technology (IJEIT) Volume 3, Issue 4, October 2013, pages 341 – 349. ISSN: 2277-3754 ISO 9001:2008 Certified.
- 63. Indrajit Pan, and Tuhina Samanta, "A Droplet Clustering and Residue Removal Technique for Cross-contamination Avoidance in Digital Microfluidic Biochip", International Journal of Computer Information Systems and Industrial Management, ISSN 2150-7988, Volume 6 (5) pp.171 -183, 2013. (IF 1.4)
- 64. Tuhina Samanta, Indrajit Pan, Ritwik Mukherjee, Hafizur Rahaman, and Parthasarathi Dasgupta, "Optimization Algorithms for Digital Microuidic Biochips: A Survey", in Elsevier journal of Computers & Electrical Engineering, Volume 39, Issue 1, January 2013, pages 112–121. (Citation 2) IF 0.817
- 65. Prasenjit Chanak, Tuhina Samanta, Indrajit Banerjee, "Fault-tolerant multipath routing scheme for energy efficient wireless sensor networks". International Journal of Wireless and Mobile Network, Volume 5(2), 2013, pages 33 45. (Citation 9)
- 66. Indrajit Pan, and Tuhina Samanta, "Weighted Optimization of Various Parameters for Droplet Routing in Digital Microfluidic Biochips", Advances in Intelligent Systems and Computing (ISI 13), Volume 235, pages: 131 – 139, Springer Cham Heidelberg, London.
- 67. Indrajit Banerjee, Anirban Datta, Sonalisa Pal, Soujanya chatterjee, and Tuhina Samanta, "A Novel Fault Detection and Replacement Scheme in WSN, Advances in Intelligent Systems and Computing (ISI 13), Volume 235, pages: 303 – 310, Springer Cham Heidelberg, London.
- 68. Santanu Datta, Indrajit Banerjee, and Tuhina Samanta, "Mobile Sink Management for Nonuniformly Distributed Sensor Node Coverage using a Game Theoretic Approach", Advances in Intelligent Systems and Computing (ISI 13), Volume 235, pages: 311 319. (Citation 3)
- 69. PrasenjitChanak, HafijurRahaman, TuhinaSamanta, Indrajit Banerjee "FTMRS: Fault Tolerance Routing Scheme for Wireless Sensor Network", Journal of wireless & Mobil Networks (JWMN), vol. 5, no. 2, pp. 33-45, 2013. DOI: 10.5121/ijwmn.2013.5203
- 70. PrasenjitChanak, Indrajit Banerjee, "Energy Efficient Fault Tolerance Multi path Scheme for Wireless Sensor Network", The Journal Posts and Telecommunications, (Elsevier) vol. 20. No. 2, pp. 42-48, 2013. DOI:10.1016/S1005-8885(13)60107-7.
- 71. U. Maulik, A. Mukhopadhyay, M. Bhattacharyya, S. Bandyopadhyay, R. Eils, B. Brors and L. Kaderali, Mining Quasi-Bicliques from HIV-1–Human Protein Interaction Network: A Multiobjective Biclustering Approach, IEEE/ACM Transactions on Computational Biology and Bioinformatics, 10(2):423-435, 2013, DOI: 10.1109/TCBB.2012.139. (Impact Factor: 1.438) [Citations: 19]
- 72. M. Bhattacharyya, M. Das and S. Bandyopadhyay, A New Approach for Combining Knowledge from Multiple Co-expression Networks of MicroRNAs, IEEE Transactions on Biomedical Engineering, 60(8):2167-2173, 2013, DOI: 10.1109/TBME.2013.2250285. (Impact Factor: 2.347) [Citations: 1]
- 73. T. Bhadra, M. Bhattacharyya, L. Feuerbach, T. Lengauer and S. Bandyopadhyay, DNA Methylation Patterns Facilitate the Identification of MicroRNA Transcription Start Sites: A Brain-specific Study, PLoS ONE, 8(6):e66722, 2013, DOI: 10.1371/journal.pone.0066722. (Impact Factor: 3.234) [Citations: 1]
- 74. M. Bhattacharyya and S. Bandyopadhyay, Studying the Differential Co-expression of MicroRNAs Reveals Significant Role of White Matter in Early Alzheimer's Progression, Molecular BioSystems, 9(3):457-466, 2013, DOI: 10.1039/c2mb25434d. (Impact Factor: 3.210) [Citations: 16]

Conference Papers

- L. Biswal, C. Bandyopadhyay, R. Wille, R. Drechesler and H. Rahaman "Improving the Realization of Multiple-Control Toffoli Gates Using NCVW Quantum Gate Library", 29th IEEE/ACM International Conference on VLSI Design and 2016 & 15th International Conference on Embedded Systems (VLSID), pp. 573 – 574, DOI: 10.1109/VLSID.2016.23.
- Malay Kule, Hafizur Rahaman and Bhargab B. Bhattacharya, "On Finding a Defect-Free Component in Nanoscale Crossbar Circuits", 4th ICECCS 2015 (Elsevier Procedia Computer Science 70 (2015) 421 – 427), pp.421-427.[Citations=0]
- 3. Anindita Chakraborty and Hafizur Rahaman, "Reconfigurable Crossbar Architectures for Memristor based Digital Gates", 6th IEEE International Conference on Computers and Devices for Communication (CODEC) 2015, December 16-18, pp.1-4. [Citations=0]
- 4. Surajit Kumar Roy, Payel Ghosh, Hafizur Rahaman, Chandan Giri, "A Thermal Estimation Model for 3D IC Using Liquid Cooled Microchannels and Thermal TSVs", IEEE VLSI-SOC 2015. [Citations=0]
- 5. Manodipan Sahoo and Hafizur Rahaman, "Modeling of Crosstalk Induced Overshoot/Undershoot Effects in Multilayer Graphene Nanoribbon Interconnects", IEEE 2nd International Conference on Electrical Information and Communication Technologies (EICT) 2015, (Accepted). [Citations=0]
- 6. Pranab Roy, Mriganka Chakrabarty, Aatreyi Bal, Hafizur Rahaman, Parthasarathi Dasgupta, "Decision-based Biochips: A Novel Design for Concurrent Execution of Networked Bioassays integrated in Scalable DMFBs", 6th IEEE Asia Symposium on Quality Electronic Design (ASQED) 2015, pp.138-143. [Citations=0]
- 7. T Kaibartta, C Giri, H Rahaman, DK Das, "Optimizing test time for core-based 3-D integrated circuits by genetic algorithm", 6th IEEE Asia Symposium on Quality Electronic Design (ASQED) 2015,pp. 62-67. [Citations=0]
- 8. S Ghosh, N Das, S Das, SP Maity, H Rahaman, "An adaptive feedback based reversible watermarking algorithm using difference expansion", IEEE 2nd International Conference on Recent Trends in Information Systems (ReTIS) 2015. [Citations=0]
- 9. SK Roy, K Roy, C Giri, H Rahaman, "Recovery of faulty TSVs in 3D ICs", 16th International Symposium on Quality Electronic Design (ISQED) 2015, pp. 533-536. [Citations=0]
- 10. Joyati Mondal, Bappaditya Mondal, Dipak K. Kole, Hafizur Rahaman, Debesh K.Das, "Boolean Difference Technique for Detecting All Missing Gate Faults in Reversible Circuits", IEEE 18th International Symposium on Design and Diagnostics of Electronic Circuits & Systems,pp.95-98, DOI 10.1109/DDECS.2015.43. [Citations=0]
- 11. Santi P. Maity and Seba Maity, 'On Detection Improvement in MC-CDMA Image Watermarking on Fading Channel', 18th Int. Symposium on Wireless Personal Multimedia Communication (WPMC2015), 13-16th December, 2015, Hyderabad, India (Accepted).
- 12. Ankita Pramanik and Santi P. Maity, CS Reconstruction Images using LDPC code over Radio Mobile channel', 5th International Conference on Wireless Communications, Vehicular

Technology, Information Theory and Aerospace & Electronic Systems (WVITAE), 13-16th December, 2015, Hyderabad, India (Accepted).

- 13. Ankita Pramanik and Santi P. Maity, CS Reconstruction in MIMO Channel using Square Complex Orthogonal STB Codes, 4TH International Conf. on Computing, Communication and Sensor Network (CCSN 2015), 24-25th December, 2015, Kolkata (Accepted).
- 14. S. Chatterjee, Santi P. Maity and Tamaghna Acharya, On Optimal Sensing Time and Power Allocation for Enerfy Efficient Co-operative Cognitive Radio Networks", IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), 15-18 December, 2015, Indian Statistical Institute, Kolkata, 2015. (Aceepted).
- 15. Sheikh Rafiul Islam, Santi P. Maity, Ajay Kumar Ray, On Compressed Sensing Image Reconstruction using Multichannel Fusion and Adaptive Filtering, 5th Int. Conference on Image Processing Theory, Tools and Applications, November 10-13, Orleans, France (Accepted).
- 16. Sheikh Rafiul Islam, Santi P. Maity, Ajay Kumar Ray, On Compressed sensing image Reconstruction using Linear Prediction in Adaptive Filtering, Fourth International Conference on Advances in Computing, Communications and Informatics (ICACCI-2015), SCMS, Kochi, India, 10-13 August, 2015 (Accepted)..
- 17. Anirban Bose, Santi Prasad Maity and Seba Maity, Image Watermarking on Degraded Compressed Sensing Measurements, Fourth International Conference on Advances in Computing, Communications and Informatics (ICACCI-2015), SCMS, Kochi, India, 10-13 August, 2015 (Accepted).
- 18. Hirak Maity and Santi Prasad Maity, Multiple Predictors based RW Scheme with Adaptive Image Partitioning, ICACCI Special Session on Recent Advances in Adaptive Systems and Signal Processing, SCMS, Kochi, India, 10-13 August, 2015 (Accepted).
- 19. S. Ghosh, T. Acharya, S. Chatterjee and S. P. Maity, "On Optimal Power Sharing for Joint Sensing and Data Transmission in Cooperative Cognitive Radio Networks", Twenty First National Conference on Communication (NCC 2014, 28th Feb. to 1st March, 2015 (Presented).
- 20. Sudip Ghosh, Subhojit Chatterjee, Santi P Maity and Hafizur Rahaman "A New Algorithm On Wavelet Based Robust Invisible Digital Image Watermarking for Multimedia Security" in International Conference on Electronic Design, Computer Networks & Automated Verification (EDCAV 2015) from 29-30th January 2015 at Shillong, NIT Meghalaya, India (Presented).
- 21. Sudeshna Sil Kar and S. P. Maity, "Blood Vessel Extraction with Optic Disc Removal in Retinal Images, The Eighth International Conference on Advances in Pattern Recognition," January 4-7, 2015, Indian Statistical Institute, Kolkata (Presented). (Citation:2)
- 22. A. Ray and S. P. Maity, On Segmentation of CS Reconstructed MR Images, The Eighth International Conference on Advances in Pattern Recognition," January 4-7, 2015, Indian Statistical Institute, Kolkata (Presented).
- 23. Sarkar, A., A. Biswas, Dutt, M., and A. Bhattacharya (2015). Generation of Random Digital Curves Using Combinatorial Techniques. In: Conference on Algorithms and Discrete Applied Mathematics: CALDAM'15. Vol. 8959. Kanpur, India: Lecture Notes in Computer Science (LNCS), Springer, pp.286--297.[Citations: 2]
- Sarkar, A., A. Biswas, M. Dutt, and A. Bhattacharya (2015). Generation of Random Triangular Digital Curves using Combinatorial Techniques. In: 6th International Conference on Pattern Recognition and Machine Intelligence: PReMI'15. Vol. 9124. Warsaw, Poland: Lecture Notes in Computer Science (LNCS), Springer, pp.136--145.[Citations: 0]
- 25. Dutt, M., A. Biswas, and B. B. Bhattacharya (2015). Enumeration of Shortest Isothetic Paths inside a Digital Object. In: 6th International Conference on Pattern Recognition and Machine Intelligence: PReMI'15. Vol. 9124. Warsaw, Poland: Lecture Notes in Computer Science (LNCS), Springer, pp.105--115.[Citations: 1]

- 26. Karmakar, N. and A. Biswas (2015). Construction of 3D orthogonal Convex Hull of a Digital Object. In: 17th International Workshop on Combinatorial Image Analysis: IWCIA'15. Vol. 9448. Kolkata, India: Lecture Notes in Computer Science (LNCS), Springer, pp. 25--40.[Citations: 0]
- 27. Prasun Seal, Mainak Chatterjee and Tuhina Samanta, "Robust energy Efficient Multipath Routing Protocol for Wireless Sensor Networks, in proceedings of IEEE International Symposium on Nanoelectronic and Information Systems, Indore, India, 2015, pages: 35 - 40.
- 28. Benazir Salma, Mainak Chatterjee and Tuhina Samanta, "Extensive Game model for Concurrent Routing in Wireless Sensor Network", in proceedings of IEEE International Conference on Green Computing and Internet of Things, Greater Noida, October 2015, pages 1151 1155.
- 29. Benazir Salma, Mainak Chatterjee and Tuhina Samanta, "A Game Theoretic Routing Framework Based on Energy-Delay Conservation in WSNs", accepted for publication at 2015 IEEE Tenth International Conference on Intelligent Sensors, Sensor Networks and Information Processing, Singapore, April 2015, pages 1 - 5.
- 30. Mrinmoy Sen, Indrajit Banerjee, Mainak Chatterjee, and Tuhina Samanta, "Sensor Localization using Received Signal Strength Measurements for Obstructed Wireless Sensor Networks with Noisy Channels, in proceedings of 2015 IEEE Wireless Communications and Networking Conference (WCNC) - Workshop - Energy Efficiency in the Internet of Things, and Internet of Things for Energy Efficiency (IEEE WCNC 2015 - Workshop - E2IoT), USA, March 2015, pages 47 -51. (Citation 1)
- 31. Partha Pratim Saha, Sumanto Saha and Tuhina Samanta, "Rectilinear Steiner Clock Tree Routing Technique with Buffer Insertion in Presence of Obstacles", in proceedings of IEEE 28th International Conference on VLSI Design, Bangalore, India, January 2015, pages 447 451.
- 32. ParthaPratim Saha, Tuhina Samanta, "Obstacle Avoiding Rectilinear Clock Tree Construction with Skew Minimization", in proceedings of IEEE 27th International Conference on VLSI Design, Mumbai, India, January 2015, pages 387 392.
- 33. Soumyajit Poddar, Prasun Ghosal, "Multicore ICs: Recent Trends in Developing Methodologies and Frameworks for Simulation", Accepted for publication in proceedings of IEEE International Conference on Nanoelectronic and Information Systems (iNIS 2015), [double blind review], December 21-23, 2015, Indore, India.
- 34. Roshni Chakraborty, Prasun Ghosal, "Generalized Optimum Reversible Circuit Synthesis: A Memetic Approach", Accepted for publication in proceedings of IEEE International Conference on Nanoelectronic and Information Systems (iNIS 2015), [double blind review], December 21-23, 2015, Indore, India.
- 35. Prasun Ghosal, Saraju P. Mohanty, "Power Minimization of a Memristor-Based Wien Bridge Oscillator through a Simscape Framework", Accepted for publication in proceedings of IEEE International Conference on Nanoelectronic and Information Systems (iNIS 2015), [double blind review], December 21-23, 2015, Indore, India.
- 36. Saurab Dutta, Prasun Ghosal, "Routing Solution Over a Multi-layered Network on Chip", In proceedings of 2015 IEEE International Conference On Electronics Computing and Communication Technologies (CONECCT 2015), [blind review], July 10-11, 2015, Bangalore, India.
- 37. Souvik Chowdhury, Prasun Ghosal, "Enterprise Application Security in Android Devices Using Short Messaging Service under Unified Communication Framework", In proceedings of 12th IEEE International Conference on Advanced and Trusted Computing (ATC 2015), [blind review], August 10-14, 2015, Beijing, China.
- 38. Subha Koley, Prasun Ghosal, "Addressing Hardware Security Challenges in Internet of Things: Recent Trends and Possible Solutions", In proceedings of 12th IEEE International Conference on Advanced and Trusted Computing (ATC 2015), [blind review], August 10-14, 2015, Beijing, China.

- 39. Mayukh Sarkar, Prasun Ghosal, "Implementing Data Structure using DNA: An Alternative in Post CMOS Computing", In proceedings of 2015 IEEE CS Annual Symposium on VLSI (ISVLSI), [blind review], Montpellier, France, July 8-10, 2015.
- 40. Angana Chakraborty, SajalSaha, Indrajit Banerjee, Arnab Gupta, "Optimized WiMAX network development in India: Specification and Implementation", Computational Advancement in Communication Circuits and SystemsLecture Notes in Electrical Engineering, vol. 335, 2015, pp. 89-99. DOI:10.1007/978-81-322-2274-3_11.
- Anibroto Sarkar, Indrajit Banerjee, "A Grouping based Prioritized Sensor data fusion Algorithm for deciding the State of a Coal Mine", Fourth International Conference on Advances in Computing, Communications and Informatics (ICACCI-2015), 2015, pp. 2083 – 2088. DOI:10.1109/ICACCI.2015.7275924.
- 42. Riddhiman Sett, Indrajit Banerjee, "An overhearing based routing scheme for Wireless Sensor Networks", Fourth International Conference on Advances in Computing, Communications and Informatics (ICACCI-2015), 2015, pp. 2076 2082. DOI:10.1109/ICACCI.2015.7275923.
- Riddhiman Sett, Indrajit Banerjee, "A Novel Routing Protocol using Heterogeneous Zigbee Modules for Mobile Sensor Network", Fourth International Conference on Advances in Computing, Communications and Informatics (ICACCI-2015), 2015, pp. 2096 – 2102. DOI: 10.1109/ICACCI.2015.7275926.
- 44. Mrinmoy Sen, Indrajit Banerjee, Mainak Chatterjee, TuhinaSamanta, "Sensor localization using received signal strength measurements for obstructed wireless sensor networks with noisy channels", IEEE Wireless Communications and Networking Conference Workshops (WCNCW), 2015, pp. 47-51. DOI: 10.1109/WCNCW.2015.7122527.
- 45. Surajit Kumar Roy, Kaustav Roy, HafizurRahaman and Chanda Giri, "Recovery of faulty TSVs in 3D ICs", Accepted for publication in the proc. of IEEE 16th International Symposium on Quality Electronic Design (ISQED 2015).
- TanikSeikh, Chandan Giri and SudipNaskar, ShibajiBandyopadhyay, "Textual Entailment Using Different Similarity Metrics" accepted in 16th International Conference on Intelligent Text Processing and Computational Linguistics(CICLing), April 14–20, 2015 • Cairo, Egypt, 2015. (Springer: Lecture Notes in Computer Science).
- 47. TanusreeKaibartta, Chandan Giri, HafizurRahaman, Debesh K. Das, "Optimizing Test Time for Core-Based 3-D Integrated Circuits by Genetic Algorithm", Accepted for publication at IEEE ASQED, 4-5th August, 2015, Malaysia.
- 48. Surajit Kunar Roy, HafizurRahaman and Chandan Giri, "A Thermal Estimation Model for 3D IC Using Liquid Cooled Microchannels and Thermal TSVs", Accepted for publication at IFIP/IEEE VLSI-SOC, 4-7th October, 2015, KSeol, Korea.
- 49. SumitDhuwalia, Nikhil Khemka, Prince Gupta, Surajit Kumar Roy, and Chandan Giri, "Test Time Optimization for 3D-SICs having multiple towers", Proc. Intl. Conf. on iNIS, 2015, 21-23 Dec, 2015, Indore, India.
- 50. Roy, Rituraj, Sayantani Bandyopadhyay, Shyamalendu Kandar, and Bibhas Chandra Dhara. "A novel 3–4 image secret sharing scheme." In Advances in Computing, Communications and Informatics (ICACCI), 2015 International Conference on, pp. 2072-2075. IEEE, 2015.
- 51. Kandar, Shyamalendu, and Bibhas Chandra Dhara. "A (k, n) Multi Secret Sharing Scheme Using Two Variable One Way Function with Less Public Values." In Information Systems Security, pp. 532-541. Springer International Publishing, 2015.
- 52. M. Bhattacharyya, Spying with the Crowd, In Proceedings of the Third AAAI Conference on Human Computation and Crowdsourcing (HCOMP), San Diego, USA, November 08-11, Paper ID 31, 2015. [Citations: 0]

- 53. M. Bhattacharyya, Studying the Reality of Crowd-powered Healthcare, In Proceedings of the Third AAAI Conference on Human Computation and Crowdsourcing (HCOMP), San Diego, USA, November 08-11, Paper ID 32, 2015. [Citations: 0]
- 54. M. Bhattacharyya, Dropout Prediction in Crowdsourcing Markets, In Proceedings of the Third AAAI Conference on Human Computation and Crowdsourcing (HCOMP), San Diego, USA, November 08-11, Paper ID 56, 2015. [Citations: 0]
- 55. S. Chatterjee and M. Bhattacharyya, A Biclustering Approach for Crowd Judgment Analysis, In Proceedings of the 2nd ACM IKDD Conference on Data Sciences (CoDS), Bangalore, India, March 18-21, ACM Press, 2015. [Acceptance rate: 43%] [Citations: 0]

- 56. Pratik Dutta, Chandan Bandyopadhyay and Hafizur Rahaman, "All Optical Implementation of Mach-Zehnder Interferometer based Reversible Sequential Counters", 28th IEEE International Conference on VLSI Design 2015, pp.232-440 (PhD Student), IEEE CS Press. [Citations=0]
- 57. Eleonora Schonborn, Kamalika Datta, Robert Wille, Indranil Sengupta, Hafizur Rahaman and Rolf Drechsler, "BDD-based Synthesis for All-optical Mach-Zehnder Interferometer Circuits", 28th IEEE International Conference on VLSI Design 2015, pp.435-440(PhD Student), IEEE CS Press. . [Citations=1]
- 58. Sudip Ghosh, Subhojit Chatterjee, Santi P. Maity, Hafizur Rahaman, "A New Algorithm On Wavelet Based Robust Invisible Digital Image Watermarking for Multimedia Security", IEEE EDCAV 2015, pp.191-196. [Citations=0]
- 59. Pranab Roy, Tamosha Chakrabarty, Hafizur Rahaman and Parthasarathi Dasgupta, "Multilevel homogeneous detection analyzer for medical diagnostic application in Digital Microfluidic Biochips ",Diagnosis of SMGF in ESOP based Reversible Logic Circuit", 5th IEEE International Symposium on Electronic System Design (ISED 2014), pp.73-78,DOI 10.1109/ISED.2014.23. [Citations=0]
- 60. Sudip Ghosh, Arijit Biswas, Santi P. Maity and Hafizur Rahaman, "Design of A Low Complexity and Fast Hardware Architecture for Digital Image Watermarking in FWHT Domain on FPGA", 5th IEEE International Symposium on Electronic System Design (ISED 2014), pp.68-72, DOI 10.1109/ISED.2014.22. [Citations=0]
- 61. Manodipan Sahoo and Hafizur Rahaman, "Impact of Line Resistance Variations on Crosstalk Delay and Noise in Multilayer Graphene Nano Ribbon Interconnects", 5th IEEE International Symposium on Electronic System Design (ISED 2014), pp.94-98, DOI 10.1109/ISED.2014.27. [Citations=1]
- 62. Bappaditya Mondal, Dipak Kumar Kole, Hafizur Rahaman and Debesh K. Das, "Generator for Test Set Construction of SMGF in Reversible Circuit by Boolean difference method", IEEE 23rd Asian Test Symposium 2014, pp.68-73, DOI 10.1109/ATS.2014.24, (PhD Student), IEEE CS Press. [Citations=2]
- 63. Bappaditya Mondal, Chandan Bandyopadhyay, Dipak K Kole, Jimson Mathew and Hafizur Rahaman, "Diagnosis of SMGF in ESOP based Reversible Logic Circuit", 5th IEEE International Symposium on Electronic System Design (ISED 2014), pp. 89-93, DOI 10.1109/ISED.2014.26, (PhD Student), IEEE CS Press. [Citations=0]
- 64. Pratik Dutta, Chandan Bandyopadhyay and Hafizur Rahaman, "All optical Implementation of Mach-Zehnder Interferometer based Reversible Sequential Circuit", 18th International Symposium on VLSI Design and Test 2014 (PhD Student), IEEE CS Press. [Citations=0]

- 65. Indrajit Das, Manodipan Sahoo, Pranab Roy and Hafizur Rahaman, "A 42 uW 12 pJ/conv-step 7.4-ENOB 40 kS/s SAR ADC for Digital Microfluidic Biochip Applications", 18th International Symposium on VLSI Design and Test 2014, (PhD Student), IEEE CS Press. [Citations=1]
- 66. Pratik Dutta, Chandan Bandyopadhyay and Hafizur Rahaman, "Mach-Zehnder Interferometer based All Optical Reversible Carry-Lookahead Adder", 28th IEEE Computer Society Annual Symposium on VLSI (ISVLSI 2014), pp.412-417. DOI: 10.1109/ISVLSI.2014.102, (PhD Student), IEEE CS Press. [Citations=0]
- 67. Surajit Kumar Roy, Payel Ghosh, Hafizur Rahaman, Chandan Giri, "Session Based Core Test Scheduling for 3D SOCs", IEEE Computer Society Annual Symposium on VLSI (ISVLSI 2014), pp.196-201 DOI: 10.1109/ISVLSI.2014.61, (PhD Student), IEEE CS Press. [Citations=1]
- 68. Pranab Roy, Rahaman and Parthasarathi Dasgupta, "Optical detection in Biochips:A fuzzy based detection analyzer for homogeneous samples in DMFBs", IEEE CYBER 2014. DOI: 10.1109/CYBER.2014.6917523. [Citations=0]
- 69. Kamalika Datta, Alhaad Gokhale, Indranil Sengupta and Hafizur Rahaman, "An ESOP based Reversible Circuit Synthesis Flow using Simulated Annealing", 1st International Doctoral Symposium on Applied Computation and Security Systems (ACSS 2014). DOI: 10.1007/978-81-322-1988-0_8. [Citations=1]
- Elenora Schonborn, Kamalika Datta, Robert Wille, Indranil Sengupta, Hafizur Rahaman and Rolf Drechsler, "OptimizingDD-based Synthesis of Reversible Circuits using Negative Control Lines", 2014 IEEE 17th International Symposium on Design and Diagnostics of Electronic Circuits & Systems (DDECS), pp.129-134. DOI: 10.1109/DDECS.2014.6868776. [Citations=3]
- 71. Pranab Roy, Hafizur Rahaman and Parthasarathi Dasgupta, "A layout based customized testing technique for total microfluidic operations in Digital Microfluidic Biochips", 2014 IEEE 17th International Symposium on Design and Diagnostics of Electronic Circuits & Systems (DDECS), pp.122-128. DOI: 10.1109/DDECS.2014.6868775. [Citations=0]
- 72. Chandan Bandyopadhyay, Hafizur Rahaman and Rolf Drechsler, "A Cube Pairing Approach for Synthesis of ESOP based Reversible Circuit", 44th IEEE International Symposium on Multiple-Valued Logic (ISMVL 2014), Bremen, Germany, pp.109-114. DOI: 10.1109/ISMVL.2014.27. [Citations=4]
- 73. Manodipan Sahoo and Hafizur Rahaman"An ABCD Parameter Based Modeling of Crosstalk Delay and Noise in Multilayer Graphene Nano Ribbon Interconnects", 2014 IEEE International Symposium on Circuits and Systems, Melbourne, Australia, June 1-5, 2014,pp.1138-1142. DOI: 10.1109/ISCAS.2014.6865341. [Citations=1]
- 74. Pranab Roy, Hafizur Rahaman and Parthasarathi Dasgupta, "Automated Two Stage Detection and Analyzer System in Multi-partitioned Digital Microfluidic Biochips", 2014 IEEE International Symposium on Circuits and Systems, Melbourne, Australia, June 1-5, 2014,pp.1836-1840. DOI:10.1109/ISCAS.2014.6865515. [Citations=0]
- 75. Chandan Bandyopadhyay, and Hafizur Rahaman , "Synthesis of ESOP-based Reversible Logic using Negative Polarity Reed-Muller Form", IEEE TechSym 2014. DOI: 10.1109/TechSym.2014.6808062[Citations=1]
- 76. Chandan Bandyopadhyay, and Hafizur Rahaman, "Synthesis of ESOP-based Reversible Logic using Positive Polarity Reed-Muller Form", Springer (ETCC 2014). DOI: 10.1007/978-81-322-1817-3_36[Citations=2]
- 77. A. Banerjee and S. P. Maity, "Energy Detection Based Cooperative Spectrum Sensing using Fuzzy Conditional Entropy Maximization," IEEE International Conference on Advanced Networks and Telecommunications Systems (IEEE ANTS 2014), 14-17 December, 2014, New Delhi, India (Accepted).

- 78. H. K. Maity, S. P. Maity and T. Bhattacharya, Prediction based Reversible Watermarking with Contrast Modification, IEEE international Image Processing Applications and Systems conference (IPAS'14), November, 5-7, 2014, Hammamet, Tunisia (Accepted). (Citation: 2)
- 79. A. Ray, S. P. Maity and H. K. Maity, On Maximization of Fuzzy Entropy for MR Image Segmentation at Compressed Sensing, IEEE international Image Processing Applications and Systems conference (IPAS'14), November, 5-7, 2014, Hammamet, Tunisia (Accepted).
- 80. T. Bhattacharya, S. P. Maity and H. K. Maity, Progressive Quality Access through Secret Sharing and Data Hiding Scheme, IEEE international Image Processing Applications and Systems conference (IPAS'14), November, 5-7, 2014, Hammamet, Tunisia (Accepted).
- 81. A. Bose, S. P. Maity and C. Delpha, On Improved Spread Spectrum Watermark Detection under Compressive Sampling", 5th European Conference European workshop on Visual Information Processing, December 10-12, 2013, Paris, France (Accepted).
- 82. A. Ray and S. P. Maity, CS Reconstructed MR image Segmentation using Morpholigical Enhancement and FCM, 4th International Conference of Emerging Applications of Information Technology (EAIT 2014), December 19-21, Kolkata, India (Accepted).
- 83. S. Chatterjee, A. Banerjee, S. P. Maity and T. Acharya, "Fuzzy C-Means Clustering in Energy Detection for Cooperative Spectral Sensing in Cognitive Radio System", 7th International Workshop on Multiple Access Communications, 27-28th August, Halmstad, Sweden (Accepted). (Citation: 1)
- 84. S. Sil Kar, S. P. Maity and Claude Delpha 'Retinal Blood Vessel Extraction Using Curvelet Transform and Conditional Fuzzy Entropy', Accepted in 22nd IEEE European Signal Processing Conference, EUSIPCO 2014, Lisbon, Portugal, September 1-5, 2014. (Citation: 2)
- 85. S. Sil Kar, S. P. Maity and Claude Delpha 'On Retinal Blood Vessel Extraction Using Curvelet Transform and Differential Evolution Based Maximum Fuzzy Entropy', Accepted in 21 IEEE International Conference on Image Processing, ICIP 2014, Paris, France, October 27-30, 2014.
- 86. S. Chatterjee, T. Acharya, and S.P. Maity, "On Joint Spectrum Sensing And Data Transmission In Relay Assisted Cognitive Radio Networks" Accepted in 9th IET International Conference on Communication Networks and Digital Signal Processing, 2014, Manchester Metropolitan University, UK, PP. 546-551.
- 87. S. Chatterjee, S.P. Maity and T. Acharya, "On Optimal Relay Power Allocation in Energy Efficient Cognitive Radio Networks" International Conference on Signal Processing and Communication, 2014, to be held in IISC Bangalore (Accepted).
- 88. P. Mukherjee, S. Chatterjee, S. P. Maity and T. Acharya, "On Optimal Power Allocation and Relay Assignment in Multiuser Cognitive Radio Networks', International Conference on Signal Processing and Communication, 2014, to be held in IISC Bangalore (Accepted).
- 89. S. Chatterjee, S. P. Maity and T. Acharya, "On Optimal Power Allocation for Joint Spectral Sensing and Data Transmission in CR Networks", 37th International Conference on Telecommunications and Signal Processing (TSP),2014, Berlin, Germany, July 1-3, 2014 (Accepted).
- S.P. Maity and S. Hati, "On CI/MC-CDMA System Design with Improved Receiver Performance" 37th International Conference on Telecommunications and Signal Processing (TSP),2014, Berlin, Germany, July 1-3, 2014 (Accepted). (Citation: 1)
- S. Sil kar and S. P. Maity, "Extraction of Retinal Blood Vessel using Curvelet and Fuzzy C-Means", 22ND International Conference on Pattern Recognition 2014, Stockholm, Sweden, 24-28th August, 2014 (Accepted). (Citation: 1)
- 92. Apurba Ray, Santi P. Maity and Sarat Yadav, 'On Segmentation of MR Images Using Curvelet and Fuzzy C-Means Under Compressed Sensing', Twentieth National Conference on Communication (NCC 2014, 28th Feb. to 1st March, 2014 (Prsented).

- 93. Sudip Ghosh, Arijit Biswas, Santi P Maity and Hafizur Rahaman "Hadamard Walsh and Paley Ordered DFWHT: A Study and Implementation on FPGA" in IEEE CALCON 2014 National Conference on Electrical, Electronics, and Computer Engineering (A Triennial Event of IEEE Kolkata Section) from November 7-8, 2014 at Hotel Park Prime Kolkata, IndiaISBN 978-93-833-0383-0
- 94. Sudip Ghosh, Nachiketa Das, Subhajit Das,Santi P Maity and Hafizur Rahaman "FPGA and SoC Based VLSI Architecture of Reversible Watermarking Using Rhombus Interpolation By Difference Expansion" in 11th IEEE India Conference INDICON 2014 from 11th to 13th December 2014 at Yashada,Pune,India (Citation: 1)
- 95. Sudip Ghosh, Arijit Biswas, Santi P Maity and Hafizur Rahaman "Design of A Low Complexity and Fast Hardware Architecture for Digital Image Watermarking in FWHT Domain on FPGA" in 5th IEEE International Symposium on Electronic System Design (ISED 2014) from December 15 - 17, 2014 at NIT Surathkal, Mangalore, India
- 96. Sudip Ghosh, Arijit Biswas, Santi P Maity and Hafizur Rahaman "Design of an Improved Algorithm for Blind Digital Image Watermarking Using Both Grayscale and Binary Watermark in DFWHT Domain" in 8th IEEE International Conference on Electrical and Computer Engineering (ICECE 2014) from 20-22 December 2014 at Pan Pacific Sonargaon,Dhaka, Bangladesh.
- 97. Sudip Ghosh, Nachiketa Das, Subhajit Das, Santi P Maity and Hafizur Rahaman "Digital Design and Pipelined Architecture for Reversible Watermarking Based on Difference Expansion using FPGA" in 13th IEEE International Conference on Information Technology (ICIT 2014) from 22nd -24th December, 2014 at Bhubaneswar, Orrisa, India.
- Bandyopadhyay, O., A. Biswas, and B. B. Bhattacharya (2014). Long Bone Fracture Detection in Digital X-ray Images based on Concavity Index. In: 16th International Workshop on Combinatorial Image Analysis: IWCIA'14. Vol. 8466. Brno, Czech Republic: Lecture Notes in Computer Science (LNCS), Springer, pp. 212--223. [Citations: 1]
- 99. Das, B., M. Dutt, A. Biswas, P. Bhowmick, and B. B. Bhattacharya (2014). A Combinatorial Technique for Construction of Triangular Covers of Digital Objects. In: 16th International Workshop on Combinatorial Image Analysis: IWCIA'14. Vol. 8466. Brno, Czech Republic: Lecture Notes in Computer Science (LNCS), Springer, pp. 76--90.[Citations: 2]
- 100. Bera, S., A. Biswas, and B. B. Bhattacharya (2014). A Fast Digital-Geometric Approach for Granulometric Image Analysis. In: 2nd International Conference on Recent Advances in Information Technology: RAIT'14. Vol. 266.Dhanbad, India: Lecture Notes in Computer Science (LNCS), Springer, pp. 37--47.[Citations: 1]
- 101. Phani, S., S. Lahiri, and A. Biswas (2014). Inter-rater Agreement Study on Readability Assessment in Bengali. In: International Conference On Natural Language Processing And Cognitive Computing. Imphal, India.[Citations:0]
- 102. Karmakar, N., P. Bhowmick, and A. Biswas (2014). Segmentation of 3D Articulated Components by Slice-based Vertex-weighted Reeb Graph. In: 18th IAPR International Conference on Discrete Geometry for Computer Imagery: DGCI'14. Vol. 8668. Sienna, Italy: Lecture Notes in Computer Science (LNCS), Springer, pp.370--383.[Citations: 1]
- 103. Roy, N. D., M. Someswar, H. Dalmia, and A. Biswas (2014). Identification of Distinct Blood Vessels in Retinal Fundus Images. In: Computational Modeling of Objects Presented in Images: Fundamentals, Methods, and Applications: CompIMAGE'14. Vol. 8641. Pittsburgh, PA, USA: Lecture Notes in Computer Science (LNCS), Springer, pp.106--114.[Citations:1]
- 104. Nazma Naskar, Sumit Adak, Pradipta Maji and Sukanta Das: Synthesis of Non-uniform Cellular Automata Having only Point Attractors. ACRI 2014: 105-114 (citation 0)
- 105. Raju Hazari, Sukanta Das. On number conservation property of ECA under α -asynchronous update. AUTOMATA 2014: 149-156 (citation 0)

- 106. Biswanath Sethi, Nazim Fatès, Sukanta Das: Reversibility of Elementary Cellular Automata under Fully Asynchronous Update. TAMC 2014: 39-49 (citation 3)
- 107. Nimisha Ghosh, Sanku Kumar Roy, Tuhina Samanta, and Indrajit Banerjee, "Path Determination Algorithm of Mobile Sinks for Energy Efficient Data Collection and Optimal Coverage in Wireless Sensor Network", 2014 International Conference on Information Technology (ICIT), Bhubaneswar, India, December 2014, pages 76 – 81.
- 108. Supantha Das, Indrajit Banerjee, Mainak Chatterjee and Tuhina Samanta, "Performance analysis of TDMA Based Data Transmission in WSN", in proceedings of IEEE 2014 14th International Conference on Intelligent Systems Design and Applications (ISDA 14), Japan, November 2014, pages 107 112.
- 109. Indrajit Pan, Tuhina Samanta, "Voltage Driven Electrowetting based Microfluidic Operations for Efficient Droplet Routing in Digital Microfluidic Biochips", in the proceedings of the 10th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications (MESA'14) Senigallia, ITALY, September 2014, pages 1 - 6.
- 110. Subhamita Mukherjee, Indrajit Banerjee, and Tuhina Samanta, "Defect aware droplet routing technique in digital microfluidic biochip", IEEE International Advance Computing Conference (IACC), New Delhi, India, February, 2014, pages: 30 35. (Citation 1)
- 111. Nimisha Ghosh; Indrajit Banerjee; Tuhina Samanta, "Energy Efficient Coverage of Static Sensor Nodes Deciding on Mobile Sink Movements using Game Theory", In proceedings of IEEE Conference on Applications and Innovations in Mobile Computing (AIMoC 2014), Kolkata, India, March 2014, pages: 118 – 125. (Citation 4)
- 112. Dhiman Ghosh, Prasun Ghosal, Saraju Mohanty, "A Highly Parameterizable Simulator for Performance Analysis of NoC Architectures", In proceedings of 13th International Conference on Information Technology (ICIT) [blind review], Bhubaneswar, India, December 22-24, 2014.
- 113. Avik Bose, Prasun Ghosal, Saraju P. Mohanty, "A Low Latency Scalable 3D NoC Using BFT Topology with Table Based Uniform Routing", In proceedings of 2014 IEEE Computer Society Annual Symposium on VLSI (ISVLSI) [blind review], Tampa, Florida, USA, July 9-11, 2014, pp. 136-141. DOI: 10.1109/ISVLSI.2014.51
- 114. Somrita Ghosh, Prasun Ghosal, Nabanita Das, Saraju P. Mohanty, Oghenekarho Okobiah, "Data Correlation Aware Serial Encoding for Low Switching Power On-Chip Communication", In proceedings of 2014 IEEE Computer Society Annual Symposium on VLSI (ISVLSI) [blind review], Tampa, Florida, USA, July 9-11, 2014, pp. 124-129. DOI: 10.1109/ISVLSI.2014.48
- 115. Debashri Roy, Prasun Ghosal, Saraju P. Mohanty, "FuzzRoute: A Method For Thermally Ef?cient Congestion Free Global Routing in 3D ICs", In proceedings of 2014 IEEE Computer Society Annual Symposium on VLSI (ISVLSI) [blind review], Tampa, Florida, USA, July 9-11, 2014, pp. 71-76.DOI: 10.1109/ISVLSI.2014.52
- 116. Tuhin Subhra Das, Prasun Ghosal, Saraju P. Mohanty, and Elias Kougianos, "A Performance Enhancing Hybrid Locally Mesh Globally Star NoC Topology", In proceedings of Great Lakes Symposium on VLSI Design (GLSVLSI 2014) [blind review], Houston, Texas, USA, May 21-23, 2014. ISBN: 978-1-4503-2816-6 doi>10.1145/2591513.2591544
- 117. Debashri Roy, Prasun Ghosal, and Nabanita Das, "A Thermal and Congestion Driven Global Router For 3D Integrated Circuits", In proceedings of 2014 IEEE Students' Technology Symposium (IEEE TechSym 2014) [blind review], IIT Kharagpur, India, February 28-March 2, 2014. ISBN: 978-1-4799-2607-7 DOI: 10.1109/TechSym.2014.6808065
- 118. Nazma Banu, Prasun Ghosal, and Prasanta K. Panigrahi, "Quantum Information Splitting of An Unknown Two Qubit State by Using Two Three Qubit GHZ Like States", In proceedings of IEEE International Conference on Electronics and Communication Systems (ICECS 2014) [blind review], Tamil Nadu, India, February 13-14, 2014.

- 119. Md Zeeshan Ashraf, Dheeraj Kumar Chouwdhary, Rohan Lal Das, and Prasun Ghosal, "An Efficient and Optimized Recommendation System Using Social Network Knowledge Base", In proceedings of IEEE International Conference on Advances in Electrical Engineering (ICAEE '14) [blind review], Vellore, India, January 9-11, 2014. (Best Paper Award with a cash prize from IEEE Computer Society, Best presentation award in Soft Computing Section)
- 120. Nimisha Ghosh, Sanku Kumar Roy, TuhinaSamanta, Indrajit Banerjee, "Path Determination Algorithm of Mobile Sinks for Energy Efficient Data Collection and Optimal Coverage in Wireless Sensor Network," International Conference on Information Technology (ICIT), 2014, pp. 76-81.DOI: 10.1109/ICIT.2014.35
- 121. Indrajit Banerjee, BishakhaDatta, AnamikaKumari, Shrabani Mandal, "Compact Clustering Based Geometric Tour Planning for Mobile Data Gathering Mechanism in Wireless Sensor Network," International Conference on Advances in Computing, Communications and Informatics (ICACCI), 2014, pp. 2098-2104. DOI: 10.1109/ICACCI.2014.6968287.
- 122. Indrajit Banerjee, SuritiChakrabarti, Arunava Bhattacharyya, UtsavGanguly, "An Energy Aware Routing Design to Maximize Lifetime of a Wireless Sensor Network with a Mobile Base Station,"International Conference on Advances in Computing, Communications and Informatics (ICACCI),2014, pp. 2135-2141. DOI:10.1109/ICACCI.2014.6968461.
- 123. SantanuDatta, Indrajit Banerjee, TuhinaSamanta, "Mobile Sink Management for Nonuniformly Distributed Sensor Node Coverage Using a Game Theoretic Approach", Recent Advances in Intelligent Informatics Advances in Intelligent Systems and Computing, vol. 235, 2014, pp 311-319. DOI: 10.1007/978-3-319-01778-5_32.
- 124. PrasenjitChanak, Indrajit Banerjee, "Load reduction with multiple mobile sinks in wireless sensor networks", IEEE Students' Technology Symposium (TechSym), IIT-Kharagpur, 2014, pp. 121-125 (Best Paper Awarded). DOI:10.1109/TechSym.2014.6807926
- 125. MoumitaSamanta, Indrajit Banerjee, "Optimal load distribution of cluster head in fault-tolerant wireless sensor network", IEEE Students' Conference on Electrical, Electronics and Computer Science (SCEECS), 2014, pp. 1-7. DOI: 10.1109/SCEECS.2014.6804505.
- 126. PrasenjitChanak, Indrajit Banerjee, "Path Discovery for Sinks Mobility in Obstacle Resisting WSNs", Advanced Computing, Networking and Informatics- Volume 2 Smart Innovation, Systems and Technologies. vol. 28, 2014, pp 39-50. DOI:10.1007/978-3-319-07350-7_5.
- 127. Nimisha Ghosh, Indrajit Banerjee, TuhinaSamanta, "Energy efficient coverage of static sensor nodes deciding on mobile sink movements using game theory", Applications and Innovations in Mobile Computing (AIMoC), 2014, pp. 118-125. DOI:10.1109/AIMOC.2014.6785529.
- 128. Indrajit Banerjee, AnirbanDatta, Sonalisa Pal, Soujanya Chatterjee, TuhinaSamanta, "A Novel Fault Detection and Replacement Scheme in WSN", Recent Advances in Intelligent Informatics Advances in Intelligent Systems and Computing, vol. 235, 2014, pp. 303-310. DOI: 10.1007/978-3-319-01778-5_31.
- 129. Surajit Roy, Payel Ghosh, HafizurRahaman and Chandan Giri, "Session based Test scheduling for minimizing the testing time of 3D SOCs", Accepted for publication in the Proc. of IEEE ICECS 2014.
- AmitavaHalder, Chandan Giri and Amiya Halder, "Brain Tumor Detection using Segmentation based Object Labeling Algorithm", In Proc. of IEEE International Conference on Electronics, Communication and Instrumentation (ICECI), pages 1-4, Kolkata, India, January, 16-17 January, 2014
- 131. Sk. Latib, Madhumita Mukherjee, Dipak Kumar Kole, Chandan Giri, "Automatic Tortuosity Detection and Measurement of Retinal Blood Vessel Network", Accepted for presentation in ICACNI Conference, Kolkata, Published by Smart Innovation, Systems and Technologies. ISSN: 2190-3018, Springer Verlag, 24-26th June, 2014

- 132. Mamata Dutta, Suman Bhowmik and Chandan Giri, "Fuzzy Logic Based Implementation For Forest Fire Detection Using Wireless Sensor Network", Accepted for presentation in ICACNI Conference, Springer, Kolkata, Published by Smart Innovation, Systems and Technologies. ISSN: 2190-3018, Springer Verlag. 24-26th June, 2014.
- 133. Surajit Kumar Roy, Payel Ghosh, HafizurRahaman and Chandan Giri, "Session Based core test scheduling for 3D SOCs", IEEE Computer Society Annual Symposium on VLSI(ISVLSI), 9th 11th June, 2014, Tampa, Florida
- 134. Pratik Dutta, Chandan Bandyopadhyaya, Chandan Giri and HafizurRahaman, "Mach-Zehnder Interferometer based all Optical Reversible Carry-Look ahead Adder", Accepted for presentation at IEEE Computer Society Annual Symposium on VLSI(ISVLSI), 9th 11th June, 2014, Tampa, Florida.
- 135. M. Bhattacharyya, Viability of Crowd-Volunteered Open Research Reviews, In Proceedings of the AAAI HCOMP Workshop on Volunteer-Based Crowdsourcing in Science, Public Health and Government (Citizen + X), Pittsburgh, USA, November 02, WS-14-20, pp. 6-7, AAAI Press, 2014 (ISBN: 978-1-577-35690-5). [Citations: 0]
- M. Bhattacharyya, S. Bhattacharya and S. Bandyopadhyay, Estimating Completeness in Streaming Graphs, In Proceedings of the EDBT/ICDT International Workshop on Multimodal Social Data Management (MSDM), Athens, Greece, March 28, CEUR 1133, pp. 294-299, 2014 (ISSN: 1613-0073). [Acceptance rate: 37.5%] [Citations: 0]

- 137. Pranab Roy, Samadrita Bhattacharyya, Rupam Bhattacharya, Hafizur Rahaman and Parthasarathi Dasgupta, "A novel wire planning technique for optimum pin utilization in Digital Microfluidic Biochips", 27th International Conference on VLSI Design(VLSI Design 2014), IEEE CS Press, USA, pp.510-515, 2014.DOI: 10.1109/VLSID.2014.95[Citations=0]
- Manodipan Sahoo, Prasun Ghosal and Hafizur Rahaman, "An ABCD Parameter Based Modeling and Analysis of Crosstalk Induced Effects in Multiwalled Carbon Nanotube Bundle Interconnects", 27th International Conference on VLSI Design (VLSI Design 2014), IEEE CS Press, USA, pp.433-438, 2014. DOI: 10.1109/VLSID.2014.81. [Citations=4]
- Manodipan Sahoo and Hafizur Rahaman, "Modelling of Crosstalk Delay and Noise in Single-walled Carbon Nanotube Bundle Interconnects", IDICON 2013, pp.1-6, (Best Paper Award).DOI: 10.1109/INDCON.2013.6725907[Citations=1]
- 140. Pranab Roy, Samadrita Bhattacharyya, Hafizur Rahaman and Parthasarathi Dasgupta, "A new technique for layout based functional testing of modules in digital microfluidic biochips", 8th IEEE International Design & Test Symposium 2013, [Citations=0]
- 141. Manodipan Sahoo and Hafizur Rahaman, "Modelling of Crosstalk Induced Effects in Nanoscale Copper Interconnects", IEEE Conference on Electrical Information and Communication Technology (ECIT), Bangladesh, 2013,DOI: 10.1109/EICT.2014.6777811[Citations=1]
- 142. Soumya Roy, Chandan Bandyopadhyay, Kamalika Datta and Hafizur Rahaman, "A Transformation Based Heuristic Synthesis Approach For Reversible Circuits", ICAEE 2013, Chenai (Accepted). DOI: 10.1109/ICAEE.2014.6838454[Citations=0]
- 143. Manjari Phadhan, Debesh K. Das, Chandan Giri and Hafizur Rahaman, "Optimizing Test Time for Core-Based 3-D Integrated Circuits by a Technique of Bi-partitioning", 11th East West Design & Test Symposium (EWDTS 2013), pp.1-4. [Citations=2]

- 144. Pranab Roy, Aatreyi Bal, Mahua Raha Patra, Hafizur Rahaman and Parthasarathi Dasgupta, "Feedback based automated detection analysis in Digital Microfluidic Biochip Systems", IEEE International Conference on Control, Automation, Robotics and Embedded systems (CARE-2013). DOI: 10.1109/CARE.2013.6733724[Citations=0]
- 145. Surajit Kumar Roy, Payel Ghosh, Hafizur Rahaman and Chandan Giri, "Session based Core Test Scheduling for Minimizing the Testing Time of 3D SOC", 11th East West Design & Test Symposium (EWDTS 2013, 1-6.DOI: 10.1109/ECS.2014.6892674 [Citations=0]
- 146. Manjari Pradhan, Chandan Giri, Hafizur Rahaman, Debesh K. Das: Optimal stacking of SOCs in a 3D-SIC for post-bond testing.3DIC 2013: 1-5. DOI: 10.1109/3DIC.2013.6702393[Citations=0]
- 147. Surajit Kumar Roy, Sobitri Chatterjee, Chandan Giri, Hafizur Rahaman: Faulty TSVs identification and recovery in 3D stacked ICs during pre-bond testing.3DIC 2013: 1-6. DOI: 10.1109/3DIC.2013.6702339[Citations=0]
- 148. Manodipan Sahoo, Hafizur Rahaman and Bhargab Bhattacharya, "Impact of Inductance in the Performance of Singlewalled Carbon Nanotube Bundle Interconnects", International Symposium on Electronic System Design (ISED 2013), pp.16-20. DOI: 10.1109/ISED.2013.10[Citations=1]
- 149. Pranab Roy, Mahua Raha Patra, Hafizur Rahaman and Parthasarathi Dasgupta, "An intelligent Biochip System for Diagnostic Process Flow based Integration of Combined Detection Analyzer", International Symposium on Electronic System Design (ISED 2013), pp.108-112. DOI: 10.1109/ISED.2013.28[Citations=1]
- 150. Manodipan Sahoo, Prasun Ghosal and Hafizur Rahaman, "An ABCD parameter based Modeling and Analysis of Crosstalk Induced Effects in Single-Walled Carbon Nanotube Bundle Interconnects", IEEE 5th Asian Symposium on Quality Electronic Design (ASQED 2013), pp.264-273. DOI: 10.1109/ASQED.2013.6643598[Citations=4]
- 151. Soumyajit Poddar, Prasun Ghosal, Priyajit Mukherjee, Suman Samui and Hafizur Rahaman, "An Area and Power Efficient Dynamic TDMA based Photonic Network on Chip", International Symposium on Electronic System Design (ISED 2013), pp.113-117. DOI: 10.1109/ISED.2013.29 [Citations=1]
- 152. Sudip Ghosh, Santi P. Maity and Hafizur Rahaman, "Multiplier-less VLSI Architecture of 1-D Hilbert Transform pair using Biorthogonal Wavelets for QCM-SS image Watermarking", 4th IEEE International

Conference on Computer and Communication Technology (ICCCT-2013). DOI: 10.1109/ICCCT.2013.6749594[Citations=0]

- 153. Chandan Bandyopadhyay, Debashri Roy, Kamalika Datta, Dipak K Kole and Hafizur Rahaman, " ESOP-based Synthesis of Reversible Circuit Using Improved Cube", International Symposium on Electronic System Design (ISED 2013), pp.26-30. DOI: 10.1109/ISED.2013.12 [Citations=5]
- 154. Pranab Roy, Samadrita Bhattacharya, Hafizur Rahaman and Parthasarathi Dasgupta, "New Method for Droplet based Synthesis and Placement in Digital Microfluidic Biochips", 17th International Symposium on VLSI Design and Test 2013 (Accepted). DOI: 10.1007/978-3-642-42024-5_43 [Citations=0]
- 155. Sourav Chakraborty, Manodipan Sahoo and Hafizur Rahaman, "A 1.8 V 64.9 µW 54.1 dB SNDR 1st order ΣΔ modulator design using clocked comparator based switched capacitor technique", IEEE 5th Asian Symposium on Quality Electronic Design (ASQED 2013), pp.220-226. DOI:10.1109/ASQED.2013.6643591[Citations=1]
- 156. Pranab Roy, Hafizur Rahaman, Parthasarathi Gupta, and Parthasarathi Dasgupta"A new customized testing technique using a novel design of droplet motion detector for digital microfluidic Biochip systems", International Conference on Advances in Computing, Communications and Informatics (ICACCI-2013), pp.897-902. DOI: 10.1109/ICACCI.2013.6637295[Citations=3]

- 157. Surajit Kumar Roy, Sobitri Chatterjee, Chandan Giri and Hafizur Rahaman," Repairing of Faulty TSVs using Available Number of Multiplexers in 3D ICs", IEEE 5th Asian Symposium on Quality Electronic Design (ASQED 2013), pp. 155 – 160. DOI: 10.1109/ASQED.2013.6643579[Citations=0]
- 158. Joyati Mondal, Debesh Das, Dipak Kumar Kole, Hafizur Rahaman and Bhargab B. Bhattacharya, "On Designing Testable Reversible Circuits Using Gate Duplication", 17th International Symposium on VLSI Design and Test 2013 (Accepted). DOI: 10.1007/978-3-642-42024-5_38 [Citations=1]
- 159. Kamalika Datta, B. Ghuku, D. Sandeep, I. Sengupta and Hafizur Rahaman, "A Cycle based Reversible Logic Synthesis Approach", ICACC 2013 (Accepted). DOI: 10.1109/ICACC.2013.67[Citations=0]
- 160. Arighna Deb, Debesh K. Das, Hafizur Rahaman, Bhargab B. Bhattacharya, Robert Wille, Rolf Drechsler: Reversible Circuit Synthesis of Symmetric Functions Using a Simple Regular Structure. 5th Conference on Reversible Computation (RC 2013), pp.182-195. DOI: 10.1007/978-3-642-38986-3_15[Citations=2]
- 161. Kamalika Datta, Gaurav Rathi, Robert Wille, Indranil Sengupta, Hafizur Rahaman and Rolf Drechsler, "Exploiting Negative Control Lines in the Optimization of Reversible Circuits", 5th Conference on Reversible Computation July 4th-5th, 2013, Victoria, Canada, pp.209-220. DOI: 10.1007/978-3-642-38986-3_17[Citations=13]
- 162. Arighna Deb, Debesh K. Das, Hafizur Rahaman, Bhargab B. Bhattacharya: Reversible synthesis of symmetric boolean functions based on unate decomposition. ACM Great Lakes Symposium on VLSI 2013 (GLSVLSI 2013), pp. 351-352, Paris, France. DOI: 10.1109/ISVDAT.2014.6881080 [Citations=0]
- Manodipan Sahoo, and Hafizur Rahaman, "Performance Analysis of Multiwalled Carbon Nanotube Bundles", 2013 IEEE XXXIII International Scientific Conference Electronics and Nanotechnology (ELNANO 2013), pp. 200-204. DOI: 10.1109/ELNANO.2013.6552004[Citations=7]
- 164. Pranab Roy, Rupam Bhattacharjee, Pampa Howladar, Hafizur Rahaman and Parthasarathi Dasgupta, "A new cross contamination aware routing technique with intelligent path exploration in Digital Microfluidic Biochips", 8th IEEE International conference on Design & Technology of Integrated Systems (DTIS'13), pp.50-55. DOI: 10.1109/DTIS.2013.6527777 [Citations=1]
- 165. Pranab Roy, Hafizur Rahaman and Parthasarathi Dasgupta, "Automated parallel detection based analyzer system for integrated bioassays in Digital Microfluidic Biochip", 2013 IEEE XXXIII International Scientific Conference Electronics and Nanotechnology (ELNANO 2013), pp.310 – 315.DOI: 10.1109/ELNANO.2013.6552005 [Citations=1]
- 166. Soumyajit Chatterjee, Hafizur Rahaman and Tuhina Samanta, "Multi-objective Optimization Algorithm for Efficient Pin-constrained Droplet Routing Technique in Digital Microfluidic Biochip", 14th International Symposium on Quality Electronic Design (ISQED 2013),pp. 252-256, Santa Clara, CA, 4Mar-6 Mar 2013.DOI: 10.1109/ISQED.2013.6523618[Citations=3]
- 167. Kamalika Datta, Vishal Shrivastav, Indranil Sengupta and Hafizur Rahaman, "Reversible Logic Implementation of AES Algorithm", 8th IEEE International conference on Design & Technology of Integrated Systems (DTIS'13), pp.140-144. DOI: 10.1109/DTIS.2013.6527794 [Citations=6]
- 168. Pranab Roy, Mahua Raha Patra, Parthasarathi Dasgupta and Hafizur Rahaman, "Digital Microfluidic System: A New Design for Heterogeneous Sample Based Integration for Multiple DMFBs", 2013 IEEE International Symposium on Circuits and Systems (ISCAS 2013), Beijing, China, 19-23 May, 2013,pp.1905-1909. DOI: 10.1109/ISCAS.2013.6572239, [Citations=3]
- 169. Tamaghna Acharya, Swagata Mandal and Santi P. Maity, Joint power and channel allocation for outage probability minimization in cognitive radio ad hoc networks, Fifth Int. Conf. on Communication Systems & Networks (COMSNETS-2013) (Presented) (Citation: 1)

- 170. Santi P. Maity, Seba Maity, Jaya Sil and Claude Delpha, Dynamic Allocation for Watermark Payload in MC-CDMA system under Fading Attack, Nineteenth National Conference On Communications, 15-17th February, 2013, IIT Delhi (Presented).
- 171. Shoubhik Chakraborty, Parveen Dhanuka, Anand Kumar and Santi P. Maity, Subcarrier and Power Allocation Scheme for Multiuser OFDM-based Cognitive Radio Systems, Nineteenth National Conference On Communications, 15-17th February, 2013, IIT Delhi (Presented).
- 172. Hirak Maity, Santi P. Maity and Claude Delpha, "A modified RCM for reversible watermarking with FPGA implementation"4th European workshop on Visual Information Processing, June 10-12, 2013, Paris, France (Accepted).
- 173. Santi P. Maity and Hirak Maity, M-ary Reversible Contrast Mapping in Reversible Watermarking with Optimal Distortion Control, 2013 th Fourth National Conf. on Computer Vision, Pattern Recognition, Image Processing and Graphics, IIT Jodhpur, 18-21 December, 2013 (Accepted). (Citation: 1)
- 174. Sudip Ghosh, Somsubhra Talapatra, Navonil Chatterjee, Nagakumar Reddy, Santi P Maity and Hafizur Rahaman, "Multiplier-less VLSI Architecture of 1-D HilbertTransform pair using Biorthogonal Wavelets" in 2nd IEEE International Conference of Informatics, Electronics & Vision (ICIEV 2013) from 17-18 May 2013, at University of Dhaka, Bangladesh. Pages: 1 - 6 url: http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6572716 (Citation: 1)
- 175. Sudip Ghosh, Santi P. Maity and Hafizur Rahaman, "Multiplier-less VLSI Architecture of 1-D Hilbert Transform pair using Biorthogonal Wavelets for QCM-SS image Watermarking", in 4th IEEE International Conference on Computer and Communication Technology (ICCCT- 2013) from 20th -22nd September 2013, at Motilal Nehru National Institute of Technology(MNNIT), Allahabad, India. Pages: 5-10 url: http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=6749594
- 176. Sudip Ghosh, Bijoy Kundu, Debopam Datta, Santi P Maity and Hafizur Rahaman "Design and Implementation of Fast FPGA based Architecture for Reversible Watermarking" in IEEE International Conference on Electrical Information and Communication Technology (EICT-2013) from 19-21 December 2013, at Khulna University of Engineering and Technology (KUET), Khulna, Bangladesh.Pages:1-6

http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=6777819 (Citation: 2)

- 177. Bandyopadhyay, O., A. Biswas, B. Chanda, and B. B. Bhattacharya (2013). Bone Contour Tracing in Digital X-ray Images based on Adaptive Thresholding. In: 5th International Conference on Pattern Recognition and Machine Intelligence: PReMI'13. Vol. 8251. ISI, Kolkata, India: Lecture Notes in Computer Science (LNCS), Springer, pp.465--473.[Citations: 3]
- 178. Mukherjee, A., U. Garain, and A. Biswas (2013). Evaluation of the Graphical Representation for Text-to-Graphic Conversion Systems. In: 10th IAPR International Workshop on Graphics Recognition. Vol. 8746. Lehigh University, Bethlehem, USA: Lecture Notes in Computer Science (LNCS), Springer, pp. 252--265. [Citations: 1]
- 179. Biswanath Sethi, Souvik Roy, Sukanta Das: Experimental study on convergence time of elementary cellular automata under asynchronous update. AUTOMATA 2013 Exploratory Papers: 87-96 (citation 3)
- 180. Nazma Naskar, Sumit Adak, Sukanta Das: Identification of non-uniform periodic boundary cellular automata having only point states. AUTOMATA 2013 Exploratory Papers: 67-76 (citation 0)
- 181. Biswanath Sethi, Sukanta Das. Modeling of asynchronous cellular automata with fixed-point attractors for pattern classification. CAAA 2013: 311-317 (citation 3)
- 182. Prasenjit Chanak, Tuhina Samanta, Indrajit Banerjee, "Quad-tree Approach for Obstacle Discovery and Tracking in Wireless Sensor Networks", Proceedings of IEEE Sensor Conference, Baltimore, USA, November 2013, pages: 1362-1365. (Citation 2)

- Prasenjit Chanak, Tuhina Samanta, Indrajit Banerjee, "Cluster Head Load Distribution Scheme for Wireless Sensor Networks", Proceedings of IEEE Sensor Conference, Baltimore, USA, November 2013, pages: 1727-1730. (Citation 3)
- 184. Supantha Das, Indrajit Banerjee and Tuhina Samanta, "Sensor Localization and Obstacle Boundary Detection Algorithm in WSN, In proceedings of IEEE Third international conference on Advances in computing and communications, Kochi, India, August 2013, pages: 412 - 415.
- 185. Partha Pratim Saha, Sumanta Saha, and Tuhina Samanta, "An Efficient Intersection Avoiding Rectilinear Routing Technique in VLSI", In proceedings of International Conference on Advances in Computing, Communication and Informatics, Mysore, pages. 559-562, August 2013.
- 186. Soumyajit Chatterjee, Hafizur Rahaman, and Tuhina Samanta, "Multi-objective Optimization Algorithm for Efficient Pin-constrained Droplet Routing Technique in Digital Microfluidic Biochip", In proceedings of IEEE international symposium on quality electronic design (ISQED 13), Santa Clara, USA, March 2012, pages: 252 – 256. (citation 3)
- 187. Indrajit Pan, Soumyajit Chatterjee, and Tuhina Samanta, "Droplet Routing and Wash Droplet Scheduling Algorithm to Remove Cross-contamination in Digital Microfluidic Biochip" In proceedings of IEEE 2012 12th International Conference on Intelligent Systems Design and Applications (ISDA 12), Pages: 155 – 160, Kochi, India, 2012. (Citation 2)
- 188. Indrajit Pan, and Tuhina Samanta, "Efficient Droplet Router for Digital Microfluidic Biochip using Particle Swarm Optimizer" In proceedings of SPIE Vol. 8760 87601Z, pages 1-10, India, January 2013. (Citation 4)
- 189. Raka Sardar, Ratna Mondal, Tuhina Samanta, "Geometry Independent Wirelength Estimation Method in VLSI Routing" in proceedings of IEEE VLSI Design Conference, Pune, pages 257 – 261, January 2013. (citation 1)
- 190. Tuhin Subhra Das, Prasun Ghosal, "A Provably Good Performance Centric NoC Topology", In proceedings of Asia Pacific conference on Post Graduate Research in Microelectronics and Electronics 2013 (PRIMEASIA) [blind review], Visakhapatnam, India, 19-21 December 2013.
- 191. Soumyajit Poddar, Prasun Ghosal, Priyajit Mukherjee, Suman Samui, and Hafizur Rahaman, "An Area and Power Efficient Dynamic TDMA based Photonic Network on Chip", In proceedings of Fourth International Symposium on Electronic System Design (ISED 2013) [blind review], NTU, Singapore, December 12-13, 2013.
- 192. Manodipan Sahoo, Prasun Ghosal, and Hafizur Rahaman, "An ABCD parameter based Modeling and Analysis of Crosstalk Induced Effects in Single-Walled Carbon Nanotube Bundle Interconnects", In proceedings of 5th Asia Symposium on Quality Electronic Design (ASQED 2013) [blind review], Penang, Malaysia, August 26-28, 2013, pp. 264-273.
- 193. Mayukh Sarkar, Prasun Ghosal, and Saraju P. Mohanty, "Reversible Circuit Synthesis Using ACO and SA Based Quine-McCluskey Method", In proceedings of IEEE 56th International Midwest Symposium on Circuits and Systems (IEEE MWSCAS) [blind review], Columbus, Ohio, USA, August 4-7, 2013, pp. 416-419. DOI: 10.1109/MWSCAS.2013.6674674
- 194. Debashri Roy, and Prasun Ghosal, "A Fuzzified Approach Towards Global Routing in VLSI Layout Design", In proceedings of 2013 IEEE International Conference on Fuzzy Systems (Fuzz-IEEE) [blind review], Hyderabad, India, July 7-10, 2013.
- 195. Soujanya Chatterjee, Anirban Datta, Soumyajyoti Banerjee, Ashish Singhi, Vivek Kr. Mishra, Prasun Ghosal, "Mobile Embedded System for Advanced Weather Forecasting in Rural Area", In proceedings of Third International Conference on Advances in Information Technology and Mobile Communication 2013 (AIM 2013) [blind review], Bangalore, India, April 26-27, 2013.
- 196. Prasun Ghosal, and Tuhin Subhra Das, "FL2STAR: A Novel Topology For On-Chip Rouing in NoC with Fault Tolerance and Deadlock Prevention", In proceedings of 2013 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT) [blind

review], Bangalore, India, Jan 17-19, 2013. Digital Object Identifier: 10.1109/CONECCT.2013.6469302

- 197. PrasenjitChanak, Indrajit Banerjee, "Fuzzy Based Dynamic Load Management Policy for Wireless Sensor Networks", IEEE 10th International Conference on High Performance Computing and Communications & 2013 IEEE International Conference on Embedded and Ubiquitous Computing (HPCC), China, 2013, pp. 1665-1670. DOI:10.1109/HPCC.and.EUC.2013.235
- 198. Supantha Das, Indrajit Banerjee, and TuhinaSamanta, "Sensor Localization and Obstacle Boundary Detection Algorithm in WSN", Third International Conference on Advances in Computing and Communications (ACC-2013), 29-31 August 2013. DOI:10.1109/ICACC.2013.88.
- 199. PrasenjitChanak, TuhinaSamanta, Indrajit Banerjee, "Quad Tree Approach for Obstacle Discovery and Tracking in Wireless Sensor Networks", IEEE SENSOR 2013, Baltimore, USA, 3-6 Nov. 2013, pp: 1362-1365. DOI:10.1109/ICSENS.2013.6688470.
- 200. PrasenjitChanak, TuhinaSamanta, Indrajit Banerjee, "Cluster Head Load Distribution Scheme for Wireless Sensor Networks", IEEE SENSOR 2013, Baltimore, USA, 3-6 Nov. 2013, pp: 1727-1730. DOI:10.1109/ICSENS.2013.6688564
- PrasenjitChanak, Indrajit Banerjee, HafizurRahaman, "Distributed Multipath Fault Tolerance Routing Scheme for Wireless Sensor Networks" 2013, IEEE Third International Conference on Advanced Computing & Communication Technologies, 2013, pp. 241-247. DOI: 10.1109/ACCT.2013.61
- 202. Srijit Chowdhury and Chandan Giri, "Data Collection Point Based Mobile Data Gathering Scheme With Relay Hop Constraint", In Proc. of International Conference on Advances in Computing, Communications and Informatics (ICACCI-2013).
- 203. Suman Bhowmik, DeepsikhaMitra and Chandan Giri, "K-Fault Tolerant Topology Control in Wireless Sensor Network", In Proc. of International Symposium on Intelligent Informatics(ISI), 2013.
- 204. Surajit Kumar Roy, Sobitri Chatterjee, Chandan Giri and HafizurRahaman, "Repairing of Faulty TSVs using Available Number of Multiplexers in 3D ICs", In Proc. of IEEE5th Asia Symposium on Quality Electronic Design (ASQED), 2013.
- 205. Manjari Pradhan, Debesh Das, Chandan Giri and HafizurRahaman, "Optimizing Test Time for Core-Based 3-D Integrated Circuits by a Technique of Bi-partitioning", Accpeted for publication in In Proc. of IEEE EWDTS, 2013.
- 206. Suman Bhowmik and Chandan Giri, "Energy Efficient Fuzzy Clustering in Wireless Sensor Network", Accepted for publication in the Proc. of Ninth International Conference on Wireless Communication & Sensor Networks(WCSN), springer LNEE, IIIT Allahabad, 16-19th December, 2013.
- 207. Arya Ghosh, Dipak Kumar Kole, Chandan Giri and Aruna Chakraborty, "Detection and Measurement of Leaf Rust Disease in Wheat", Accepted for publication in International conference on Facets of Uncertainties and Applications (ICFUA), 2013. December, Kolkata.
- 208. Manjari Pradhan, Chandan Giri, HafizurRahaman, Debesh K. Das: Optimal stacking of SOCs in a 3D-SIC for post-bond testing. Proc. of IEEE Intl. conference on 3DIC, pp:1-5, 2-4thCotober2013.
- 209. Surajit Kumar Roy, Sobitri Chatterjee, Chandan Giri, HafizurRahaman: Faulty TSVs identification and recovery in 3D stacked ICs during pre-bond testing. Proc. of IEEE Intl. conference on 3DIC, pp:1-6, 2-4thCotober2013.
- 210. M. Bhattacharyya, Analyzing Flightfox: Who takes the Cake before the Take-off?, In Proceedings of the AAAI HCOMP Workshop on Crowdsourcing at Scale (CrowdScale), Palm Springs, USA, November 09, Position Paper 02, 2013.

- 211. M. Bhattacharyya, Opinion Ensembling: Learning from Dependent Judgements of the Crowd, In Proceedings of the AAAI HCOMP Workshop on Crowdsourcing at Scale (CrowdScale), Palm Springs, USA, November 09, Shared Task Challenge Paper 01, 2013.
- 212. M. Bhattacharyya and S. Bandyopadhyay, Prioritization of Clusters for Post-genomic Analysis, In Proceedings of the First International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA), Kalyani, India, September 27-28, Procedia Technology 10, pp. 3-12, Elsevier, 2013 (ISSN: 2212-0173). [Acceptance rate: 39%]

CEGESS

Journals:

(2015)

- S Chabri, A Dhara, B Show, D Adak, A Sinha and N Mukherjee, "Mesoporous CuO–ZnO p–n heterojunction based nanocomposites with high specific surface area for enhanced photocatalysis and electrochemical sensing", Catalysis Science & Technology, 2016, DOI: 10.1039/C5CY01573A Impact Factor: 5.426, Citation: 0
- S Ghosh, R Bhattacharya, H Saha, CR Chaudhuri and N Mukherjee, "Functionalized ZnO/ZnO2 n-N straddling heterostructure achieved by oxygen plasma bombardment for highly selective methane sensing", Journal Name: Physical Chemistry Chemical Physics, 17 (2015) 27777-27788, Impact Factor: 4.493, Citation: 1.
- 3. E Kar, N Bose, S Das, N Mukherjee and S Mukherjee, "Enhancement of electroactive β phase crystallization and dielectric constant of PVDF by incorporating GeO2 and SiO2 nanoparticles", Journal Name: Physical Chemistry Chemical Physics, 17 (2015) 22784-22798, Impact Factor: 4.493, Citation: 2.
- 4. S Banerjee, AK Saha, B Show, J Ganguly, R Bhattacharyay, SK Datta, H Saha and N Mukherjee, "A regular rippled pattern formed by the molecular self-organization of polyvinylpyrrolidone encapsulated Ag nanoparticles: a high transmissive coating for efficiency enhancement of c-Si solar cells", Journal Name: RSC Advances, 5 (2015) 5667-5673, Impact Factor: 3.840, Citation: 1.
- B Mondal, J Das, C Roychaudhuri, N Mukherjee and H Saha, "Enhanced sensing properties of ZnO-SnO2 based composite type gas sensor", Journal Name: The European Physical Journal Applied Physics, 73 (2015). Impact Factor: 0.77, Citation: 0.
- SouravMandal, Gourab Das, SukantaDhar, M. RajiveTomy, SumitaMukhopadhyay, ChandanBanerjee, A.K.Barua, "Development of a Novel Fluorinated n-nc-SiO:H material for application in Solar cell", Materials Chemistry and Physics, 157 (2015) 130. Impact Factor: 2.259. Citation: 2.
- Sourav Mandal, Gourab Das, SukantaDhar, M. RajiveTomy, SumitaMukhopadhyay, Chandan Banerjee, A.K. Barua, "Fabrication of single junction amorphous silicon solar cell/mini module using novel n-type nanocrystallineSiOx:F:Hbackreflector", J Mater Sci: Mater Electron, 26 (2015), 331. Impact Factor: 1.569. Citation: 0.
- Sourav Mandal, SuchismitaMitra, SukantaDhar, Hemanta Ghosh, ChandanBanerjee, Swapan K. Datta and Hiranmay Saha, "Potential of ITO nanoparticles formed by hydrogen treatment in PECVD for improved performance of back grid contact crystalline silicon solar cell", Applied Surface Science 349 (2015) 116. Impact Factor: 2.711. Citation: 1.
- 9. SukantaDhar, Sourav Mandal, Gourab Das, SumitaMukhopadhyay, ParthaPratim Ray, Chandan Banerjee and Asok Kumar Barua, "Silicon heterojunction solar cells with novel fluorinated n-type

nanocrystallinesilicon oxide emitters on p-type crystalline silicon", Jpn. J. Appl. Phys. 54 (2015) 08KD03. Impact Factor: 1.127. Citation: 0.

- SuchismitaMitra, Hemanta Ghosh, HiranmaySaha and Swapan Kumar Datta, "Investigation of different contact geometries for partial rear metal contact of high-efficiency silicon solar cells", J. Phys. D: Appl. Phys. 48 (2015) 465106. Impact Factor: 2.721. Citation: 0.
- AvraKundu, Sonali Das, HiranmaySaha, Swapan K. Datta, "Wide angle light collection with ultralow reflection and super scattering by silicon micronanostructures for thin crystalline silicon solar cell applications", Journal of Optics, 18(2015) 015903. Impact Factor: 2.059. Citation: 0.
- 12. Sonali Das, AvraKundu, HiranmaySaha, Swapan K. Datta, "Investigating the potential of nanoplasmonics for wafer based crystalline silicon solar cells", Plasmonics, (2015) 1-13. Impact Factor: 2.238. Citation: 3.
- BiplobMondal, SantanuMaity, Sonali Das, Dipankar Panda, HiranmaySaha, AvraKundu, "Fabrication and packaging of MEMS based platform for hydrogen sensor using ZnO – SnO₂ composites", Microsystem Technologies, (2015) 1-8. Impact Factor: 0.952. Citation: 0.

(2014)

- 14. H Chakraborty, A Sinha, N Mukherjee, D Ray and P Protim Chattopadhyay, "Indentation and scratch behavior of functionalized MWCNT–PMMA composites at the micro/nanoscale", Journal Name: Polymer Composites, 35 (2014) 948-955, Impact Factor: 1.632, Citation: 4.
- 15. B Mondal, B Basumatari, J Das, C Roychaudhury, H Saha and N Mukherjee, "ZnO–SnO2 based composite type gas sensor for selective hydrogen sensing", Journal Name: Sensors and Actuators B: Chemical, 194 (2014) 389-396, Impact Factor: 4.097, Citation: 34.
- S Ghosh, C RoyChaudhuri, R Bhattacharya, H Saha and N Mukherjee, "Palladium–Silver-Activated ZnO Surface: Highly Selective Methane Sensor at Reasonably Low Operating Temperature", Journal Name: ACS applied materials & interfaces, 6 (2014) 3879-3887, Impact Factor: 6.723, Citation: 8.
- N Mukherjee, H Chakraborty and SF Ahmed, "A comparative study on the cold field electron emission properties of cubic nanocrystalline lead chalcogenide thin films", Journal Name: RSC Advances, 4 (2014) 5312-5315, Impact Factor: 3.840, Citation: 0.
- Chandan Banerjee, RajiveTomy M, Sourav Mandal, SumitaMukhopadhyay, A K Barua, "Development of oxide based window and buffer layer for single junction amorphous solar cell: Reduction of light induced degradation.", Materials Science in Semiconductor Processing 24C (2014) 50. Impact Factor: 1.955. Citation: 1.
- A. Datta, G. Bhattacharya, D. Mukherjee and H. Saha, "An Efficient Technique for Controlling Power Flow in a Single-Stage Grid-Connected Photovoltaic System", Scientia Iranica Transactions D: Electrical Engineering (Accepted, in-press) (2014). Impact Factor: 1.025. Citation: 0.

 AvraKundu, Sonali Das, S. M. Hossain, Swapan K. Datta, HiranmaySaha, "Tapered Silicon Nanopillars for enhanced performance thin film solar cells", Energy Procedia 54 (2014) 389-399. Citation: 1.

(2013)

- B Chakraborty, B Show, S Jana, B Chandra Mitra, S K Maji, B Adhikary, N Mukherjee, A Mondal, "Cathodic and anodic deposition of FeS 2 thin films and their application in electrochemical reduction and amperometric sensing of H2O2", Journal Name: ElectrochimicaActa, 94 (2013) 7-15, Impact Factor: 4.5, Citation: 9.
- 22. S K Bhar, S Jana, A Mondal, N Mukherjee, "Photocatalytic degradation of organic dye on porous iron sulfide film surface", Journal Name: Journal of Colloid and Interface Science, 393 (2013) 286-290, Impact Factor: 3.368, Citation: 8.
- H Chakraborty, A Sinha, N Mukherjee, D Ray, PP Chattopadhyay, "A study on nanoindentation and tribologicalbehaviour of multifunctional ZnO/PMMA nanocomposite", Journal Name: Materials Letters, 93 (2013) 137-140, Impact Factor: 2.466, Citation: 19.
- 24. Chandan Banerjee, T Srikanth, U Basavaraju, R M Tomy, M G Sreenivasan, K Mohanchandran, S Mukhopadhyay, A K Barua, "Development of n-μc-SiO:H as cost effective back reflector and its application to thin film amorphous silicon solar cells.", Solar Energy 97 (2013) 591–595. Impact Factor: 3.469. Citation: 6.
- 25. Sonali Das, Chandan Banerjee, AvraKundu, PrasenjitDey, HiranmaySaha, Swapan K. Datta, "Silica nanoparticles on front glass for efficiency enhancement in superstrate type amorphous silicon solar cells", Journal of Physics D: Applied Physics, 46 (2013). Impact Factor: 2.721. Citation: 7.
- 26. Sonali Das, AvraKundu,HiranmaySaha, Swapan K. Datta, "Design of high efficiency solar cells with lossless nanoentities atop and embedded in silicon substrate", Journal of Optics, 15 (2013) 105006. Impact Factor: 2.059. Citation: 6.
- Sonali Das, AvraKundu, HiranmaySaha, Swapan K. Datta, "Effect of embedding silica nanoparticles and voids in the performance of c- Si solar cells", Journal of Renewable and Sustainable Energy, 5 (2013) 031603-1-031603-11. Impact Factor: 1.514. Citation: 4.
- 28. Sonali Das, AvraKundu, HiranmaySaha, Swapan K. Datta, "Enhanced optical absorption and electrical performance of silicon solar cells due to embedding of dielectric nanoparticles and voids in the active absorber region", Journal of Modern Optics, 60 (2013) 556-568. Impact Factor: 1.008. Citation: 4.

Conference:

(2015)

- SuchismitaMitra, SukantaDhar, HemantaGhosh,Chandan Banerjee, Swapan K Datta, HiranmaySaha, "Enhanced tunable light trapping from tin oxide scattering nanoparticles array at rear side of grid contact crystalline silicon solar cell", 25th International Photovoltaic Science and Engineering Conference and Exhibition. November 16-20, 2015. BEXCO Busan, Korea.
- Sukanta Dhar, Sourav Mandal, Suchismita Mitra, Hemanta Ghosh, Chandan Banerjee, Swapan K Datta, Hiranmay Saha, "Light Trapping in a-Si / c-Si Heterojunction Solar Cells by Embedded ITO Nanoparticles at the Rear Surface", 25th International Photovoltaic Science and Engineering Conference and Exhibition. November 16-20, 2015. BEXCO Busan, Korea.
- Hemanta Ghosh, SuchismitaMitra, Chandan Banerjee, Swapan Kumar Datta, HiranmaySaha, "Analysis of Light Scattering Properties of Tin Oxide (SnO2) Nanoparticles and its Application in c-Si Solar Cell", 18th International workshop on Physics of Semiconductor Devices at Indian Institute of Science, Bangalore, India, Dec 7-10, 2015.
- 4. SuchismitaMitra, Hemanta Ghosh, Chandan Banerjee, Swapan Kumar Datta, HiranmaySaha, "Analysis of Internal Back Reflection with Scattering DBR and Contact Geometry for Partial Rear Metal Contact c-Si Solar Cells", 18th International workshop on Physics of Semiconductor Devices at Indian Institute of Science, Bangalore, India, Dec 7-10, 2015.
- Jayasree Roy Sharma, Sukanta Bose, Gourab Das, Arpita Jana, SumitaMukhopadhyay, Chandan Banerjee, A.K.Barua, "Chemical Etching of O-Polar and Zn-Polar ZnO:Al Crystals for Thin Film Silicon Solar Cells" National Seminar on Advanced Functional Materials, Technology and its Social Implications (NSAFMTSI – 2014), Haldia Institute of Technology, Haldia, January 30-31, 2015.
- Gourav Das, Arokiyadoss R, Sourav Mandal, Sukanta Bose, SukantaDhar, Jayasree Roy Sharma , SumitaMukhopadhyay, A.K.Barua, "Fabrication of high efficiency a-Si solar cells on flexible Kapton substrate", 25th International Photovoltaic Science and Engineering Conference, Bexco, Busan, Korea, November 15 - 20, 2015.
- GourabDas,Sukanta Bose, Sourav Mandal, SukantaDhar, SumitaMukhopadhyay, A.K.Barua, "Texturization of glass by plasma etching and their application in single junction a-Si thin film solar cell", 25th International Photovoltaic Science and Engineering Conference, Bexco, Busan, Korea, November 15 - 20, 2015.
- GourabDas,Sourav Mandal, SukantaDhar, <u>P. BalajiBhargav</u>, SumitaMukhopadhyay, A.K.Barua, "Synthesis of ITO nanoparticles with Ar plasma in room temperature and its application in flexible thin film solar cell", 25th International Photovoltaic Science and Engineering Conference, Bexco, Busan, Korea, November 15 20, 2015.

- 9. Jayasree Roy Sharma, Sukanta Bose, Sourav Mandal, Gourab Das, Arpita Jana, SukantaDhar, Rajasi Mandal, SumitaMukhopadhyay, A. K. Barua, "Influence of different types of seeding on the growth of ZnOnanorods for application in radial junction silicon thin film solar cells", 25th International Photovoltaic Science and Engineering Conference, Bexco, Busan, Korea, November 15 20, 2015.
- Souarv Mandal, SukantaDhar, Gourab Das, <u>P. BalajiBhargav</u>, SumitaMukhopadhyay, A.K.Barua, "Improvement of the performance of p-i-n structure of a-Si Solar Cell by using n-μc-Si:H /n-a-Si:H bilayer as the n-layer", 25th International Photovoltaic Science and Engineering Conference, Bexco, Busan, Korea, November 15 - 20, 2015.
- 11. SouarvMandal,GourabDas,SukantaDhar, <u>P. BalajiBhargav</u>,SumitaMukhopadhyay,A.K.Barua, "Studies on the effect of introducing oxide buffer layers at the TCO/p interface of single junction p-i-n structure a-Si solar cell", 25th International Photovoltaic Science and Engineering Conference, Bexco, Busan, Korea, November 15 - 20, 2015.
- 12. SukantaDhar, Sourav Mandal, Gourab Das, Kausturi Chatterjee, SumitaMukhopadhyay, Chandan Banerjee, A K Barua, "Development of well-defined ITO nano-rods by pulse DC magnetron sputtering as a potential material for photovoltaic applications", 18th International workshop on Physics of Semiconductor Devices at Indian Institute of Science, Bangalore, India, Dec 7-10, 2015.
- 13. Gourab Das, Sourav Mandal, SukantaDhar, P BalajiBhargav, SumitaMukhopadhyay, Chandan Banerjee, P Ramasamy, A K Barua, "Beneficial effects of high rf frequency on development of hydrogenated microcrystalline silicon material as well as performance of microcrystalline cell", 18th International workshop on Physics of Semiconductor Devices at Indian Institute of Science, Bangalore, India, Dec 7-10, 2015.
- 14. Sukanta Bose, Jayasree Roy Sharma, Gourab Das, Sourav Mandal, SukantaDhar, Arpita Jana, SumitaMukhopadhyay, A K Barua, "Studies on the etching behavior of Al:ZnO thin film to alkalis for application in the front layer of p-i-n solar cells", 18th International workshop on Physics of Semiconductor Devices at Indian Institute of Science, Bangalore, India, Dec 7-10, 2015.
- 15. Jayasree Roy Sharma, Sukanta Bose, Sourav Mandal, Gourab Das, SukantaDhar, Arpita Jana, SumitaMukhopadhyay, A K Barua, "Effect of KOH on the growth of ZnO nanostructures for application in silicon thin film solar cells", 18th International workshop on Physics of Semiconductor Devices at Indian Institute of Science, Bangalore, India, Dec 7-10, 2015.
- Sourav Mandal, Gourab Das, SukantaDhar, M. RajiveTomy, Chandan Banerjee, A.K. Barua, "Inclusion of Fluorine to Improve Refractive Index of Nanocrystalline Silicon Oxide Layer for Application in Solar Cell as BRL", IC-EEE, February 4-7, 2015, Cochin , India.
- 17. SanhitaMajumdar, Anupam Nandi, Swapan. K. Datta, HiranmaySaha, "Wet Chemical Synthesis of Reduced Graphene Oxide and its Application as Selective Carbon Monoxide Gas Sensor", 18th

International workshop on Physics of Semiconductor Devices at Indian Institute of Science, Bangalore, India, Dec 7-10, 2015.

- ArijitBardhan Roy, Arup Dhar, MrinmoyeeChoudhuri, Sonali Das, Pritam Banerjee, AvraKundu, "Silicon Micro-Nanopillars as Solar Tracker for Thin Crystalline Photovoltaic Application", 5th International Conference on Advances in Energy Research (ICAER), IIT Bombay, Mumbai, Dec 2015.
- 19. Arup Dhar, MrinmoyeeChoudhuri, ArijitBardhan Roy, Pritam Banerjee, AvraKundu, "Metamaterial Mirror as Back Reflector for Thin Silicon Solar Cell Application", 5th International Conference on Advances in Energy Research (ICAER), IIT Bombay, Mumbai, Dec 2015.
- 20. ArkaDey, Mrinmay Das, JoydeepDatta, Rajkumar Jana, Chandan Banerjee and ParthaPratim Ray, "Development of large area nanostructured silicon-hydrogen alloy material with improved stability for solar cell application by argon dilution method", 25th International Photovoltaic Science and Engineering Conference and Exhibition. November 16-20, 2015. BEXCO Busan, Korea.
- 21. ArkaDey, AnimeshLayek, Mrinmay Das, JoydeepDatta, Rajkumar Jana, Chandan Banerjee and ParthaPratim Ray, "Possibility to use hydrothermally synthesized CuFeS2 nanocomposite as an acceptor in hybrid solar cells", 25th International Photovoltaic Science and Engineering Conference and Exhibition. November 16-20, 2015. BEXCO Busan, Korea.
- 22. Tathagata Sarkar, Joydip Jana, HiranmaySaha, "Study of DC Microgrid Accompanying with Renewable Energy Sources for Rural Application", India Smart Grid Forum, March, 2015.
- 23. Indranil Das, Joydip Jana, Abhijit Das, Tanushree Dutta, AnirbanGuria, HiranmaySamanta, HiranmaySaha, "Efficient MPPT charging of supercapacitor from solar PV module", 25th International Photovoltaic Science and Engineering Conference and Exhibition Global Photovoltaic Conference 2015.
- MohdAlam, Joydip Jana, HiranmaySaha, "Switched Boost Inverter Applicable for Solar Photovoltaic System Based Micro-Grid", 2nd International Conference on Control, Instrumentation, Energy & Communication, Jan 2015.
- 25. SohamAdhya, Dipak Kumar Saha, Abhijit Das, Joydip Jana, HiranmaySaha, "An IoT Based Smart Solar Photovoltaic Remote Monitoring and Control unit", 2nd International Conference on Control, Instrumentation, Energy &Communication, Jan 2015.
- 26. Tathagata Sarkar, Sayantan Chatterjee, Konika Das Bhattacharya, HiranmaySaha, "Development of Ramp-Rate Controller to Assure Voltage Stability for Weak Distribution Grid with High Penetration of Solar PV", PVSEC-25 & GPVC-2015, Busan, South Korea, Nov 2015.

(2014)

- SukantaDhar, Sourav Mandal, Gourab Das, Chandan Banerjee, SumitaMukhopadhyay, A. K. Barua, "Silicon Heterojunction Solar Cells with novel Fluorinated n-type Nanocrystalline Silicon Oxide Emitters on p-type c-Si", WCPEC6, Japan, 2014.
- Gourab Das, Sourav Mandal, SukantaDhar, Sukanta Bose, Arpita Jana, SumitaMukhopadhyay, Chandan Banerjee, A.K.Barua, "Texturization of Al:ZnO Glass Substrate by Reactive ion Etching and its application to Single junction a-Si Solar cells", WCPEC6, Japan, 2014.
- 29. SouravMandal,SukantaDhar,SumitaMukhopadhyay,ChandanBanerjee,Asok Kumar Barua, "Effect of hydrogen plasma treatment on structural and optical properties of sputtered ITO", ICAMET,IIEST, Shibpur, December 17-19, 2014.
- 30. Arpita Jana, Sukanto Bose, Gourab Das, Jayasree Roy Sharma, Chandan Banerjee, SumitaMukhopadhyay, A.K.Barua, "Wet chemical etching of ZnO:Al thin film for application in the front layer of p-i-n solar cell" ICAMET, IIEST, Shibpur, December 17-19, 2014.
- Joydip Jana, HiranmaySaha, "Development of a Low Cost and Reliable Power MOSFET Gate Driver for Bridge Configuration", 6th IEEE Power India International Conference, Dec 2014.
- 32. Joydip Jana, Konika Das Bhattacharya, HiranmaySaha, "Design & Implementation of MPPT Algorithm for Battery Charging with Photovoltaic Panel Using FPGA", 6th IEEE Power India International Conference, Dec 2014.

(2013)

- 33. T. Srikanth, U. P. Basavaraju, RajiveTomy M, M. G. Sreenivasan, Chandan Banerjee, K. Mohanchandran, SumitaMukhopadhyay, A. K. Barua, "Development of n-μc-SiO:H as a back reflector and its application to Amorphous Silicon Solar Cells", 28th European Photovoltaic Solar Energy Conference and Exhibition, Paris, France, September 30 October 4, 2013.
- 34. Sonali Das, PrasenjitDey, AvraKundu, S. M. Hossain, Swapan K. Datta, HiranmaySaha, "Mixture of metal and dielectric nanoparticles for improved performance of silicon solar cell", 4th International Conference on Advances in Energy Research (ICAER), IIT Bombay, Mumbai, Dec 2013.
- 35. AvraKundu, Sonali Das, S. M. Hossain, Swapan K. Datta, HiranmaySaha, "Tapered Silicon Nanopillars for enhanced performance thin film solar cells", 4th International Conference on Advances in Energy Research (ICAER), IIT Bombay, Mumbai, Dec 2013.
- 36. Sonali Das, AvraKundu, Chandan Banerjee, PrasenjitDey, Swapan K. Datta, HiranmaySaha, "Front surface glass texturization for improved performance of amorphous silicon solar cell", 17th International Workshop on The Physics of Semiconductor Devices (IWPSD), Amity University, Uttar Pradesh, Dec 2013.

Patent:

1. Fabrication of n-type microcrystalline silicon oxide films for use as back reflectors in silicon based thin film solar cells. [File No.: 1347/CHE/2013, Mar. 26, 2013]

Summary Total International Journal: 28 Total citation in journals: 121 Total International Conferences: 36 Total Patents: 1

Computer Science and Technology

Publications 2013-2015

2015

- 1. Rajrup Ghosh, Dipanjan Ghosh, Sreemoyee Roy and Abhik Mukherjee; *Exploring the Self Similar Properties for Monitoring of Air Quality Information;* ICAPR, 2015.
- 2. Sayan Mandal; Samit Biswas; Amit Kumar Das; Bhabatosh Chanda; *Map image bina- rization and stitching using extraction of regions*, Journal of Theoretical and Applied Computer Science, Vol 9(1):2840, 2015.
- 3. Samit Biswas, Sekhar Mandal and Amit Kumar Das, *Representation and Reconstruc- tion of Map Regions*, International Conference on Document Analysis and Recognition (ICDAR), 2015.
- 4. Tamali Banerjee, Samit Biswas, Hand-drawn Line Removal from Bangla Printed Docu- ment Images, IEEE CGVIS, 2015.
- Sarkar, A, A Biswas, M Dutt, and A Bhattacharya, *Generation of Random Digital Curves using Combinatorial Techniques*, In: Conference on Algorithms and Discrete Applied Mathematics (CALDAM), Springer. 2015, pp.286–297.
- 6. Sarkar, A, A Biswas, M Dutt, and A Bhattacharya, *Generation of Random Triangular Digital Curves Using Combinatorial Techniques*, 6th International Conference on Pattern Recognition and Machine Intelligence (PReMI). Springer, 2015, pp.136–145.
- 7. Sarkar, A and M Dutt, Construction of Sandwich Cover of Digital Objects. In Seventeenth International Workshop on Combinatorial Image Analysis, IWCIA. Springer, 2015, pp.172–184.

- 8. Sarkar, A and A Kar, *Construction of Hexagonal Covers of Digital Objects Using Combinatorial Technique*, In: Seventeenth International Workshop on Combinatorial Image Analysis. RPS, 2015.
- Jana, P.; Majumdar, A.; Layek, A.K.; Mandal, S.; Das, A.K., "Automated segmentation and classification of chemical and other equations from document images", Eighth International Conference on Advances in Pattern Recognition (ICAPR), 2015
- 10. B. Sen, M. Dutta, R. Mukherjee, R. Nath, A. Sinha, and B K Sikdar, "Towards the design of hybrid qca tiles targeting high fault tolerance," Journal of Computational Electronics, 2015, pp. 1–17.
- 11. B. Sen, A. Nag, A. Dey and B. K. Sikdar, "Towards the hierarchical design of multilayer QCA logic circuit", Journal of Computational Science, <u>Elsevier</u>, volume 11, 2015, pp 233 244.
- Bibhash Sen, Mrinal Goswami, Subhra Mazumdar and Biplab K Sikdar, "Towards Modular Design of Reliable QCA Logic Circuit using Multiplexer", Computers and electrical Engineering Journal, Elsevier, Vol 45, 2015, pp 42-54.
- 13. Rajdeep Kumar Nath, Bibhash Sen, Rachit Daga, Nilesh Chakraborty, Harsh Tibrewal, Biplab K Sikdar. "Fault masking in Quantum-dot cellular automata using prohibitive logic circuit" In 19th International Symposium on VLSI Design and Test (VDAT), 2015, pp 1-5.
- 14. Mausumi Saha and Biplab K. Sikdar:- A Cellular Automata Based Fault Tolerant Approach in Designing Test Hardware for L1 Cache Module; ISVLSI, 2015, pp 497-502.
- 15. Mausumi Saha, Navneet Kumar Gautam and Biplab K. Sikdar:- A fault tolerant test hardware for L1 cache module in tile CMPs architecture; 19th International Symposium on VLSI Design and Test (VDAT), 2015, pp 1-6.
- Mausumi Saha, Shubhra and Biplab K. Sikdar:-An efficient method for testing of L1 cache module in tiled CMPs architecture at low cost; VLSI Systems, Architecture, Technology and Applications (VLSI-SATA), 2015.
- Bidesh Chakraborty, Bhanu Pratap Singh, M. Chinnapureddy, Mamata Dalui, Biplab K Sikdar. Design of Coherence Verification Unit for Heterogeneous CMPs, 19th International Symposium on VLSI Design and Test (VDAT), 2015.
- 18. Indrajit De and Jaya Sil, No-reference image quality assessment using interval type 2 fuzzy sets, Applied Soft Computing 30, 2015, pp 441–453.
- 19. Nanda Dulal Jana and Jaya Sil, *Levy distributed parameter control in differential evolution for numerical optimization*, Springer Natural Computing, 2015, pp 1-14.
- 20. Pratyay Konar, Jaya Sil, Paramita Chattopadhyay, *Knowledge extraction using data mining for multi*class fault diagnosis of induction motor, Neurocomputing 166, 2015, pp 14–25.
- 21. Jaya Sil, and Zenefa Rahaman, Optimizing Large Search Space using DE Based Q-learning Algorithm, American Academic & Scholarly Research Journal Vol. 7, No. 5, 2015.
- 22. Malay Kule, Hafizur Rahaman, Bhargab B. Bhattacharya, *On Finding a Defect-Free Component in Nanoscale Crossbar Circuits*, Fourth International Conference on Eco-friendly Computing and Communication Systems, Elsevier Procedia Computer Science, Volume 70, 2015, pp. 421–427.
- 23. Sayan Mandal; Samit Biswas; Amit Kumar Das; Bhabatosh Chanda; *Map image bina- rization and stitching using extraction of regions*, Journal of Theoretical and Applied Computer Science, Vol 9(1):2840, 2015.
- 24. M. B. Zafar, P. Bhattacharya, N. Ganguly, K. P. Gummadi, S. Ghosh, *Sampling Content from Online Social Networks: Comparing Random vs. Expert Sampling of the Twitter Stream*, ACM Transactions on the Web (TWEB), vol. 9, issue 3, 2015, pp. 12:1 12:33.

- K. Rudra, S. Ghosh, N. Ganguly, P. Goyal, S. Ghosh, *Extracting Situational Information from Microblogs during Disaster Events: A Classification-Summarization Approach*, ACM International Conference on Information and Knowledge Management (CIKM), 2015.
- S. Dutta, S. Ghatak, M. Roy, S. Ghosh, A. K. Das, A graph based clustering technique for tweet summarization, IEEE International Conference on Reliability, Infocom Technologies and Optimization (ICRITO), 2015, pp. 1--6.
- C. Freitas, F. Benevenuto, S. Ghosh, A. Veloso, Reverse Engineering Socialbot Infiltration Strategies in Twitter, IEEE/ACM International Conference on Advances in Social Networks Analysis (ASONAM), 2015.
- J. Kulshrestha, M. B. Zafar, L. E. Noboa, K. P. Gummadi, S. Ghosh, *Characterizing Information Diets of Social Media Users*, AAAI International Conference on Web and Social Media (ICWSM), 2015.
- K. Rudra, A. Chakraborty, M. Sethi, S. Das, N. Ganguly, S. Ghosh, *#FewThingsAboutIdioms:* Understanding Idioms and its Users in the Twitter Online Social Network, Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD), 2015.
- Sen, K. Rudra, S. Ghosh, *Extracting Situational Awareness from Microblogs during Disaster Events*, Social Networking Workshop in conjunction with International Conference on Communication Systems & Networks (COMSNETS), 2015.
- 31. Sekhar Mandal, Paramita De, Partha Bhowmick and Amit Kumar Das; ASKME: Adaptive Sampling with Knowledge Driven Vectorization of Mechanical Engineering Drawings, International Journal on Document Analysis and Recognition, accepted for publica.
- 32. Sekhar Mandal, Paramita De, Partha Bhowmick and Bhabatosh Chanda; Topological Simplification of Electrical Circuits by Super-component Analysis, 13th International Conference on Document Analysis and Recognition (ICDAR), 2015.
- Sekhar Mandal, S. Biswas and A. K. Das; Representation and Reconstruction of map regions, In Proc. of 13th International Con- ference on Document Analysis and Recognition (ICDAR 2015), September 23-26, 2015, pp - 516-520.
- 34. Sekhar Mandal, Paramita De, Amit Kumar Das and Bhabatosh Chanda; Detection of Electrical Circuit Elements from Documents Images, Document Recognition and Retrieval, SPIE-IS&T Electronic Imaging, Vol. 9402, 940200 © 2015 SPIE-IS&T, pp 940200-1 - 940200-11.
- 35. Sekhar Mandal, Prerana Jana, Anubhab Majumdar, Ashish Kumar Layek and Amit Kumar Das; Automated segmentation and classification of chemical and other equations from document images, Eighth International Conference on Advances in Pattern Recognition 2015, pp 1-7.
- 36. Sekhar Mandal, Sugata Das and Amit Kumar Das; Binarization of Stone Inscripted Documents, IEEE International Conference on Computer Graphics, Vision and Information Security, 2015.
- Sekhar Mandal, Sugata Das and Amit Kumar Das; Binarization of Degraded Handwritten Documents based on Morphological Contrast intensification, Third International Conference on Image Information Processing, 2015.
- 38. Sekhar Mandal, Ramanath Datta, Paramita De and Bhabatosh Chanda; Detection and Identification of Logic Gates from Document Images using Mathematical Morphology, Fifth National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics, 2015.
- 39. Rajib Banerjee, Shibashis Chatterjee and Sipra DasBit, An Energy Saving Audio Compression Scheme for WMSN using Spatio-temporal Partial DWT, Journal of Computer and Electrical Engineering, Elsevier Science, vol 48, 2015, pp 389-404.

- 40. Subir Halder and Sipra DasBit, Design of an Archimedes' Spiral based Node Deployment Scheme Targeting Enhancement of Network Lifetime in Wireless Sensor Networks, Journal of Network and Computer Applications, Elsevier Science, vol 47, 2015, pp 147-167.
- 41. Amrita Ghosal and Sipra DasBit, A Lightweight Security Scheme for Query Processing in Clustered Wireless Sensor Networks, Journal of Computer and Electrical Engineering, Elsevier Science, vol 41, 2015, pp 240-255.
- 42. T. Pal and S.DasBit, A new CFA based image compression technique for energy-starved wireless multimedia sensor network, IEEE INDICON, 2015.
- 43. T. Pal, S. Bandyopadhyay, S.DasBit, Energy-saving image transmission over WMSN using block size reduction technique, IEEE iNIS, 2015.
- 44. R.Banerjee and S. DasBit, Low-Overhead Image Compression in WMSN for Post Disaster Situation Analysis, IEEE ANTS, 2015.
- 45. Roy Chowdhury and S. DasBit, LMAC: A Lightweight Message Authentication Code for Wireless Sensor Network, IEEE GLOBECOM, 2015.
- 46. T. Chatterjee, P. Banerjee and S. DasBit, LoENA: Low-overhead Encryption based Node Authentication in WSN, IEEE ICACCI, 2015 pp 2126-2132.
- 47. Roy, T. Acharya and S. DasBit, Energy-Aware Social-Based Multicast in Delay-Tolerant Networks, IEEE VTC, 2015, pp 1-6.
- 48. S. Mitra and A. Roy, "Communication Void Free Routing Protocol in Wireless Sensor Network", Wireless Personal Communication, Springer, vol. 82, no. 4, 2015, pp 2567-2581.
- 49. B. Bhabani, A. Mondal and S. Mitra, "A Demand Based Unicast Data Dissemination Scheme in VANET", IEEE INDICON, 2015.
- 50. Mondal and S. Mitra, "Secure Data Dissemination in VANET A Pull Based Approach", IEEE Communication, Networks and Satellite (COMNETSAT), 2015.
- Bhabani and S. Mitra, "Efficient Bandwidth Utilization during Message Dissemination among Authentic Vehicles in VANET", International Conference on Advances in Computing, Communications and Informatics (ICACCI), 2015, pp. 935-941.
- 52. S. Mitra, "Cooperative Revocation of Misbehaving Vehicles from VANET", Information Systems Design and Intelligent Applications, proceedings published by Springer Series of Advances in Intelligent Systems and Computing (AISC), 2015.
- 53. Mondal and S.Mitra, "Detection and Revocation of Misbehaving Vehicles from VANET", International Conference on Communication and Computer Engineering (2014), Lecture notes in Electrical Engineering, vol. 315, Chapter 72, 2015, pp. 767-778.
- 54. S. Saha Ray, S. Ghosh and B. Sardar, SRAM Based Longest Prefix Matching Approach for Multigigabit IP Processing, IEEE ANTS, 2015.
- 55. S. Ghosh, S. Mandal and S. Saha Ray, A Scalable High-Throughput Pipeline Architecture for DNA Sequence Alignment, IEEE TENCON, 2015.
- 56. S. Bhattacharyya, P. Dutta and S. Chakraborty, "Hybrid Soft Computing Approaches" International Publication by Springer Germany, 2015.
- 57. Debajyoti Bera, Subhamoy Maitra, Sparsa Roychowdhury, Susanta Chakraborty, "Diagnosis of single faults in quantum circuits", arXiv:1512.05051, 2015.

- 58. Tapan Chowdhury, Sanjit Kumar Setua, Susanta Chakraborty "A Novel Rules Optimizer with Feature Selection using Rough-Entropy-Coverage Partitioning based Reduct". 3rd International Conference on Computer, Communication, Control and Information Technology (C3IT), 2015.
- 59. Hrishikesh Bhaumik, Siddhartha Bhattacharyya, and Susanta Chakraborty, "Enhancement of Perceptual Quality in Static Video Summarization Using Minimal Spanning Tree Approach", IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems (IEEE SPICES), 2015, pp 226-232.
- 60. Hrishikesh Bhaumik, Siddhartha Bhattacharyya, Mausumi Das Nath and Susanta Chakraborty "Real-Time Storyboard Generation in Videos Using a Probability Distribution based Threshold", Fifth IEEE International Conference on Communication Systems and Network Technologies (CSNT), 2015, pp 425-431.
- 61. Sarit Chakraborty, Chandan Das, Susanta Chakraborty and Partha P Dasgupta "A Novel Two Phase Heuristic Routing Technique in Digital Microfluidic Biochip" Proceedings of the 19th International symposium on VLSI Design and Test (VDAT), 2015.
- 62. Hrishikesh Bhaumik, Siddhartha Bhattacharyya, Manideepa Chakraborty and Susanta Chakraborty, "Dissolve Detection in Videos Using an Ensemble Approach", Fourth IEEE International Conference on Advances in Computing, Communications and Informatics (ICACCI 2015), 2015, pp 1461-1467.
- 63. Bikromadittya Mondal, Pradyut Sarkar, and Susanta Chakraborty, "A Improved synthesis of reversible Circuit" Proceedings of the 24th Asian Test symposium and 16th IEEE w0rkshopon RTL and High level Testing, 2015, pp 57-62.
- 64. Abantika Chowdhury, Abhijit Sharma, Uma Bhattacharya, Overview of Location management in PCS network: A survey, ICACNI, 2015.
- 65. Abhishek Bandyopadhyay, Debdutto Chakraborty, Uma Bhattacharya and Monish Chatterjee, On Improving Static Routing and Wavelength Assignment in WDM All-Optical Mesh Networks, ICACNI, 2015.

2014

- 66. Sreemoyee Roy and Abhik Mukherjee, *Exploring fractal features in the mixing height zone of planetary boundary layer from observed sodar data*, Remote Sensing Letters 5, 2014, pp 823-832.
- 67. S Chattaraj and Abhik Mukherjee; *Efficient in-flight transfer alignment using evolutionary strategy based particle filter algorithm;* ICINCO, 2014.
- 68. S Chattaraj and Abhik Mukherjee; Particle filter based attitude matching algorithm for in-flight transfer alignment; ICECE, 2014.
- 69. Jagadish Kundu and Abhik Mukherjee; Implementation of software cybernetics for efficient resource usage in software maintenance projects; EAIT, 2014.
- 70. Monosij Maitra and Abhik Mukherjee; Convergence of the min-sum decoding scheme for LDPC codes from a dynamical systems perspective; EAIT, 2014.
- 71. Rajrup Ghosh, Dipanjan Ghosh, Sreemoyee Roy and Abhik Mukherjee; *Effect of data availability at different resolutions on air quality monitoring*; CALCON, 2014, pp 16-19.
- 72. Sayan Mandal, Samit Biswas and Amit Kumar Das, Land Map Image Dataset: Ground- truth and Classification using Visual and Textural Features, Image Processing & Communications, 19(4):3755, 2014.
- 73. Samit Biswas, Amit Kumar Das, and Bhabatosh Chanda' *Text segmentation from bangla land map images*, Image Processing & Communications, 19(1):2134, 2014.

- Samit Biswas; Sekhar Mandal; Amit Kumar Das and Bhabatosh Chanda, Land map images binarization based on distance transform and adaptive threshold, Document Analysis Systems (DAS), 2014, pp 334-338.
- 75. Sayan Mandal, Samit Biswas, Amit Kumar Das, and Bhabatosh Chanda, *Binarisation of colour map images through extraction of regions, In Computer Vision and Graphics*, International Conference, ICCVG, 2014, pp 418-427.
- Bibhash Sen, Manojit Dutta and Biplab K Sikdar, Efficient design of parity preserving logic in quantumdot cellular automata targeting enhanced scalability in testing; Microelectronics Journal, Elsevier, 45(2), 2014, pp 239-248.
- 77. Bibhash Sen, Manojit Dutta, Mrinal Goswami and Biplab K Sikdar:-Modular design of testable reversible ALU by QCA multiplexer with increase in programmability; Elsevier, vol 45, No 11, 2014.
- Bibhash Sen, Manojit Dutta, Samik Some and Biplab K Sikdar:- Realizing reversible computing in QCA framework resulting efficient design of testable ALU; ACM Journal on Emerging Technologies in Computing Systems, Vol. 11, No. 3, Article 30, 2014.
- 79. Bibhash Sen, Manojit Dutta, Rijoy Mukherjee and Biplab K Sikdar:- Design of Fault Tolerant Quantum-Dot Cellular Automata Logic Primitives; 40th Int'l Micro and Nano Engineering Conference, 2014.
- Bibhash Sen, Rijoy Mukherjee, Rajdeep Kumar Nath and Biplab K Sikdar:- Design of Fault Tolerant Universal Logic in QCA; 5th International Symposium on Electronic System Design (ISED), 2014, pp 1-6.
- 81. Mamata Dalui and Biplab K Sikdar:- CA Based Scalable Protocol Processor for Chip Multiprocessors; 5th International Symposium on Electronic System Design (ISED), 2014.
- 82. Bibhash Sen, Aman Agarwal, Rajdeep K Nath, Rijoy Mukherjee and Biplab k Sikdar, "Efficient design of fault tolerant tiles in QCA," Annual IEEE India Conference (INDICON), 2014, pp 1-6.
- 83. Baisakhi Das, Mousimi Saha, Sukanta Das and Biplab K Sikdar; A CA Based Scheme Of Cache Zone Prediction for Data Migration In CMPs, 11th INDICON, 2014.
- Dipankar Dutta, Paramartha Dutta and Jaya Sil, Simultaneous feature selection and clustering with mixed features by multi objective genetic algorithm, International Journal of Hybrid Intelligent Systems 11 (2014), 2014, pp 41–54.
- 85. S. Dutta, M. Roy, A. K. Das, S. Ghosh, *Sentiment Detection in Online Content: A WordNet Based Approach*, International Conference on Swarm, Evolutionary and Memetic Computing (SEMCCO), 2014.
- Das, M. Roy, S. Dutta, S. Ghosh, A. K. Das, *Predicting Trends in the Twitter Social Network: A Machine Learning Approach*, International Conference on Swarm, Evolutionary and Memetic Computing (SEMCCO), 2014.
- 87. P. Bhattacharya, M. B. Zafar, N. Ganguly, S. Ghosh, K. P. Gummadi, *Inferring User Interests in the Twitter Social Network*, ACM Conference on Recommender Systems (RecSys), 2014.
- 88. P. Bhattacharya, S. Ghosh, J. Kulshrestha, M. Mondal, M. B. Zafar, N. Ganguly, K. P. Gummadi. *Deep Twitter Diving: Exploring Topical Groups in Microblogs at Scale.* ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW), 2014.
- 89. Sekhar Mandal, Paramita De, Partha Bhowmick and Amit Kumar Das; A New Approach to Detect and Classify Graphic Primitives in Engineering Drawings, Fourth International Conference of Emerging Applications of Information Technology, 2014, pp 243 248.
- 90. Sekhar Mandal, <u>Mrinmoy Ghorai and</u> Bhabatosh Chanda; A Two-Step Image Inpainting Algorithm Using Tensor SVD, <u>ACCV Workshops (2), 2014, pp</u> 63-77.

- 91. Sekhar Mandal, <u>Mrinmoy Ghorai and</u> Bhabatosh Chanda; Image Completion Assisted By Transformation Domain Patch Approximation, <u>ICVGIP, 2014, pp</u> 66:1-66:8.
- 92. Paramita De, S. Mondal, Partha Bhowmick, Identification of Annotations in Electrical Drawings, 5th International Conference on Signal and Image Processing, 2014, pp 297 300.
- 93. Subir Halder and Sipra DasBit, Design of a Probability Density Function targeting Energy-Efficient Node Deployment in Wireless Sensor Networks, IEEE Transactions on Network and Service Management, Vol 11, No. 2, 2014, pp 204-219.
- 94. Subir Halder and Sipra DasBit, Enhancement of Wireless Sensor Network Lifetime by Deploying Heterogeneous Nodes, Journal of Network and Computer Applications, Elsevier Science, Vol 38, 2014, pp 106-124.
- 95. D. Banerjee and S. DasBit, Reviving Communication in Post Disaster Scenario Using ZIGBEE/GSM Heterogeneous Network, ICACCI, 2014, pp 2067-2073.
- 96. Roy Chowdhury, T. Chatterjee, S. DasBit, LOCHA: A Light-Weight One-way Cryptographic Hash Algorithm for Wireless Sensor Network, Procedia Computer Science vol. 32, 2014, pp 497-504.
- 97. R. Banerjee, M. Mobashir, S. DasBit, Partial DCT-based Energy Efficient Compression Algorithm for Wireless Multimedia Sensor Network, IEEE CONECCT, 2014, pp 1-6.
- S. Mitra and A. Mondal, "Joint Congestion Control Strategy during V2V Communication among Authentic Vehicles in VANET", Wireless Personal Communication, Springer, vol.79, issue no. 1, 2014, pp 43-67.
- Mondal and S. Mitra, "Dynamic and Distributed Channel Congestion Control Strategy in VANET", IEEE International Conference on Advances in Computing, Communications and Informatics (ICACCI), 2014, pp 1697-1703.
- S. S. Ray, S. Ghosh, R. Prasad, Low-Cost Hierarchical Memory-Based Pipelined Architecture for DNA Sequence Matching, India Conference (INDICON), 2014.
- 101. S. S. Ray, A. Bhattacharya, S. Ghosh, A Fast Range Matching Architecture with Unit Storage Expansion Ratio and High Memory Utilization using SBiCAM for Packet Classification, India Conference (INDICON), 2014.
- 102. S. S. Ray, A. Chatterjee, S. Ghosh, A Novel Approach for Prefix Minimization using Ternary Trie (PMTT) for Packet Classification, IEEE TENCON, 2014.
- 103. Bikromadittya Mondal and Susanta Chakraborty "A Comprehensive Fault Dignosis Technique for reversible Circuit" Electrical Engineering Journal, Elsevier, 2014.
- 104. Nabanita Das, SusantaChakraborty, and ParthaSarathiDasgupta "Optimized Routing and Pin-Constrained design of digital Micro-Fludic Bio-Chip" International Journal on Information Theory (IJIT), Vol3, No1, 2014.
- 105. Bikromadittya Mondal and Susanta Chakraborty "A Novel Fault Diagnosis Technique in Reversible Logic Circuit" 11th IEEE International Conference on Embedded Software and Systems (ICESS), 2014.
- 106. <u>Somak Das</u>, Susanta Chakraborty "<u>Structural Testing of Partitioned Digital Microfluidic</u> <u>Biochips</u>" IEEE International Conference on VLSI & Signal Processing, 2014.
- 107. Hrishikesh Bhaumik, Siddhartha Bhattacharyya, and Susanta Chakraborty "Video Shot Segmentation Using Spatio-Temporal Fuzzy Hostility Index and Automatic Threshold". IEEE International Conference on Communication Systems and Network Technologies (CSNT), pp 501-506.

- 108. Hrishikesh Bhaumik, Siddhartha Bhattacharyya, and Susanta Chakraborty : "An unsupervised method for real time video shot segmentation". Fourth International Conference on Digital Image Processing and Pattern Recognition (DPPR), 2014, pp 307-318.
- 109. S. De, S. Bhattacharyya and S. Chakraborty, "Application of Pixel Intensity Based Medical Image Segmentation Using NSGA II Based OptiMUSIG Activation Function," The International Conference on Computational Intelligence and Communication Networks (ICCICN), 2014.
- 110. S. De, S. Bhattacharyya and S. Chakraborty, "Automatic Data Clustering by Genetic Algorithm Validated by Fuzzy Inter cluster Hostility Index," Fourth International Conference of Emerging Applications of Information Technology (EAIT), 2014.
- 111. Hrishikesh Bhaumik, Siddhartha Bhattacharyya, and Susanta Chakraborty "Towards Redundancy Reduction in Storyboard Representation for Static Video Summarization." IEEE International Conference on Advances in Computing, Communications and Informatics (ICACCI), 2014, pp. 344-350.
- 112. Pradyut Sarkar, Bikromadittya Mondal, Amit Pramanik and Susanta Chakraborty "Symmetric Function Realization using Reversible Circuit Synthesis", 34th IEEE TENCON, 2014.
- 113. Pradyut Sarkar, Bikromadittya Mondal, Susanta Chakraborty and Virendra Singh, "Power optimization Technique of Logic Circuit Based on Distribution of Energy" IEEE INDICON, 2014.
- 114. Abhijit Sharma, Pratik Sharma, Rituparna Chaki, Uma Bhattacharya, *Reducing Call Blocks in Cellular Network with non-uniform traffic conditions*, International Journal Foundations of Computing and Decision Sciences, vol. 39, No. 4, 2014.
- 115. Sharma, P. Kar, P. Biswas and U. Bhattacharya, *Adaptive Call Admission Control Scheme with Optimal Resource Allocation for Multi-Class Cellular Networks*, International Journal of Autonomous and Adaptive Communications Systems (IJAACS), 2014.
- 116. Ira Nath, Monish Chatterjee, Uma Bhattacharya, *A Survey on Regenerator Placement Problem in Translucent Optical Network*, International Conference on Circuits, Systems, Communication and Information Technology Applications (CSCITA), 2014, pp 408-413.
- 117. Sharma, S. Konai and U. Bhattacharya, *New Call and Handoff Call Management Scheme for Reuse Partitioning Based Cellular Systems*, IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE), 2014.
- 118. Abhishek Bandyopadhyay, Mohtasham Raghib, Uma Bhattacharya, Monish Chatterjee Dynamic Survivable Traffic Grooming with Effective Load Balancing in WDM All-Optical Mesh Networks, ICACCI, 2014.

2013

- 119. Suvendu Chattaraj, Abhik Mukherjee and SK Chaudhuri, *Transfer alignment problems:* algorithms and design issues, Journal of Gyroscopy and Navigation; Springer; 2013; 4(3); pp 130-146.
- 120. Durjoy Majumder and Abhik Mukherjee, *Multi-scale Modeling Approaches in Systems Biology Towards the Assessment of Cancer Treatment Dynamics: Adoption of Middle-out Rationalist Approach*, Advances in cancer: research and treatment, 2013, 2326-702X.
- 121. Samit Biswas and Amit Kumar Das, *Text segmentation from land map images, Pattern Recognition and Machine Intelligence*, 2013, pp 521-529.
- 122. Soumen Kumar Pati, Asit Kumar Das and Arka Ghosh, Gene Selection using Multi-Objective Genetic Algorithm integrating Cellular Automata and Rough Set Theory, Internantional Conference on Swarm, Evolutionary, and Memetic Computing (SEMCCO), 2013.

- 123. Bibhash Sen, Siddhant Ganeriwal and Biplab K Sikdar, Reversible logic-based fault-tolerant nanocircuits in QCA; ISRN Electronics, Hindawi, 2013.
- 124. Bibhash Sen, Ayush Rajoria and Biplab K Sikdar, Design of efficient full adder in quantum-dot cellular automata; The Scientific World Journal, Hindawi, 2013.
- 125. Mamata Dalui and Biplab K Sikdar, A Protocol Independent Test Design for Quick Determination of Incoherency in CMPs' Cache; IEEE 2013 4th International Conference on Intelligent Systems, Modeling and Simulation, 2013, pp 420-427.
- 126. Mamata Dalui, Keshav Gupta, and Biplab K Sikdar, Directory based cache coherence verification logic in cmps cache system. International Workshop on Many-core Embedded System (MES), 2013, pp 23-24.
- 127. Mamata Dalui and Biplab K Sikdar, Design of Directory Based Cache Coherence Protocol Verification Logic in CMPs around TACA; International Conference on High Performance Computing and Simulation, Helsinki, 2013.
- 128. Mousumi Saha and Biplab K Sikdar, Cellular Automata Based Design of Self Testable Hardware For March C-; International Conference on High Performance Computing and Simulation, Helsinki, 2013.
- 129. Mousumi Saha and Biplab K Sikdar, A Self Testable Hardware For Memory; IEEE International Conference on Circuits and Systems (ICCAS); 2013.
- 130. Bibhash Sen, Mrinal Goswami, Samik Some and Biplab K Sikdar, Design of Sequential Circuits in Multilayer QCA Structure; 4th International Symposium on Electronic System Design (ISED), 2013.
- 131. Baisakhi Das, Nirmalya Sundar Maiti, Sukanta Das Mousimi Saha and Biplab K Sikdar, Design of an Efficient Scheme for Data Migration in Chip Multiprocessors; 4th International Symposium on Electronic System Design (ISED), 2013.
- 132. Baisakhi Das, Nirmalya Sundar Maiti, Sukanta Das and Biplab K Sikdar, An Efficient Scheme For Data Block Migration In Tiled CMPs Cache System; INDICON, 2013.
- 133. Bibhash Sen, Anirban Nag, Asmit De and Biplab K Sikdar, Multilayer Design of QCA Multiplexer; INDICON, 2013, pp 1–6.
- 134. Santi P. Maity, Seba Maity, Jaya Sil and Claude Delpha, Optimized Spread spectrum watermarking for fading-like collusion attack with improved detection, Special Issue on Wireless Personal Communications Journal, Springer Verlag, vol. 69, no. 4, 2013.
- 135. Nandita Sengupta, Jaydeep Sen, Jaya Sil and Moumita Saha, Designing of On Line Intrusion Detection System Using Rough Set Theory and Q Learning Algorithm, Elsevier Neurocomputing Journal, vol. 111, 2013, 161-168.
- 136. Santi P. Maity, Seba Maity, Jaya Sil and Claude Delpha, Perceptually Adaptive MC-SS Image Watermarking using GA-NN Hybridization in Fading Gain, International Scientific Journal on Engineering Applications of Artificial Intelligence, Elsevier, 2013.
- 137. Santi P. Maity, Seba Maity, Jaya Sil, Claude Delpha, Collusion resilient spread spectrum watermarking in M-band wavelets using GA-fuzzy Hybridization, The Journal of Systems and Software, Elsevier Science Direct, vol. 86, 2013, pp 47-59.
- 138. Santanu Phadikar, Jaya Sil, Asit Kumar Das, Rice diseases classification using feature selection and rule generation techniques, Computers and Electronics in Agriculture, vol. 90, 2013, pp 76-85.
- 139. P. Konar, M. Saha, J. Sil and P. Chattopadhyay, Fault Diagnosis of Induction Motor Using CWT and Rough-Set Theory, IEEE Symposium on Computational Intelligence in Control and Automation (CICA), 2013, pp 9-15.

- 140. Amit Paul and Jaya Sil, Gene Selection for Classifying Patients using Fuzzy Importance Factor, IEEE International Conference on Fuzzy Systems (FUZZ-IEEE), 2013.
- 141. D. Dutta, P. Dutta, and J. Sil, Simultaneous continuous feature selection and K- clustering by multi objective genetic algorithm, IEEE Int. Advance Computing Conf. (IACC), 2013, pp. 937–942.
- 142. S. Ghosh, S. Saha, A. Srivastava, T. Krueger, N. Ganguly, A. Mukherjee, Understanding Evolution of Inter-Group Relationships using Bipartite Networks, IEEE Journal on Selected Areas in Communications (JSAC) - Special Issue on Emerging Technologies in Communications, vol. 31, issue 9, 2013, pp 584 - 594.
- 143. S. Ghosh, M. B. Zafar, P. Bhattacharya, N. Sharma, N. Ganguly, K. Gummadi, *On Sampling the Wisdom of Crowds: Random vs. Expert Sampling of the Twitter Stream*, ACM International Conference of Information and Knowledge Management (CIKM), 2013.
- 144. Subir Halder and Sipra DasBit, Enhancement of Wireless Sensor Network Lifetime by Deploying Heterogeneous Nodes, Journal of Network and Computer Applications, Elsevier Science, 2013.
- 145. Amrita Ghosal, Sipra Das Bit, A Jamming Attack Defending Data Forwarding Scheme Based on Channel Surfing in Wireless Sensor Networks, Journal of Security and Communication Networks, Wiley, 6(11), 2013, pp 1367-1388.
- 146. Dutta, R. Banerjee, S. DasBit, Energy Efficient Audio Compression Scheme Based on Red Black Wavelet Lifting for Wireless Multimedia Sensor Network, Intl. Conf. on Advances in Computing, Communications and Informatics (ICACCI), 2013.
- 147. Ghosal, Aadirupa Saha, S. DasBit, Energy Saving Replay Attack Prevention in Clustered Wireless Sensor Network, Pacific Asia Workshop on Intelligence and Security Informatics, LNCS, 2013.
- 148. S. Mitra, "Seamless Mobility Management A Need for Next Generation All-IP Wireless Networks", Chapter-19 of the book "Security, Privacy, Trust, and Resource Management in Mobile and Wireless Communications", IGI-Global: 2013, pp 463-489.
- 149. S. Mitra and T. Ghosh, "Congestion Control and Revocation of Misbehaving Vehicles in VANET", Journal of Network and Innovative Computing, vol.1, 2013, pp 43-54.
- 150. S.Mitra, "Bandwidth Allocation for Vehicle Based Nodes in Heterogeneous Wireless Networks", International Journal of Sensors, Wireless Communication and Control, vol. 3, no.1, 2013, pp 12–24.
- 151. S. Mitra, "Secure Vehicular Communication A Database Approach", International Conference on Computing and Systems (ICCS), 2013, pp 112-117.
- 152. S. Mitra, "Dynamic Resource Reservation for Authentic Vehicles in VANET", International Conference on Innovations in Engineering and Technology (ICIET), Section–I, 2013, pp 25-29.
- 153. S. Mitra, "Authentication and Revocation of Vehicles using VIN in VANET", International Conference on Advance Trends in Engineering and Technology (ICATET), 2013, pp 133–139.
- 154. S. Mitra, "Channel Congestion Control during Secure V2V Communication in VANET", International Conference on Advance Trends in Engineering and Technology (ICATET), 2013, pp 115– 120.
- 155. S. Mitra and A.Mondal, "VIN Based Vehicle Authentication in VANET", International Conference on Computing, Communication and Sensor Network (CCSN), 2013, pp 191–197.
- 156. S. S. Ray, A. Chatterjee, S. Ghosh, A Hierarchical High-throughput and Low Power Architecture for Longest Prefix Matching for Packet Forwarding, IEEE International Conference on Computational Intelligence and Computing Research, 2013, pp 628-631.

- 157. S. Ghosh, S. S. Ray, S. Mandal, High Through-put Scalable Query Processing Architecture using STCAM, Proc. of IEEE International Conference on Computational Intelligence and Computing Research, 2013, pp. 650-653.
- 158. Sourav De, Siddhartha Battacharyya, Susanta Chakraborty, True Color Image Segmentation by NSGA-II based Parallel OptiMUSIG (ParaOptiMUSIG) Activation Function. International Conference on Machine Intelligence Research and Advancement (ICMIRA-2013), 2013.
- 159. B. Mondal, P. Saha, P. Sarkar and S. Chakraborty, "Synthesis of Balanced Ternary Logic Function" Proceeding of 43rd IEEE International Symposiumon Multivalued Logic (ISMVL), 2013.
- 160. Subhadip Chandra, Siddartha Bhattacharya and Susanta Chakraborty, A Quantam inspired time efficient 0ptiMUSIG activation function for multilevel image segmentation. IEEE INDICON, 2013.
- 161. Ditipriya Sinha, Uma Bhattacharya and Rituparna Chaki, *CLAR, A novel cluster oriented agent based routing protocol for MANET*, International Journal on Foundations of Computing and Decision Sciences Vol. 38, No. 1, 2013.
- 162. M. Chatterjee, A. Sharma and U. Bhattacharya, *Fault Tolerant Routing for Minimizing Congestion in WDM Optical Networks Based on de Bruijn Graph*, The Mediterranean Journal of Computers and Networks, SoftMotor Ltd., 2013.
- 163. Abhijit Sharma, Uma Bhattacharya, *Load Balancing Scheme for Wireless Cellular Networks*, 7th International Conference on Ubiquitous Information Management and Communication (ICUIMC), 2013.

CITATIONS

Year	Google Scholar	SCOPUS	WOS
2015	36	-	-
2014	111	-	-
2013	149	-	-

Chemistry

List of Publications for the Year 2015

- <u>S. Paul, S. Goswami, C. D. Mukhopadhyay</u>, "A remarkable ratiometric fluorescent chemodosimeter for very rapid detection of hydrogen sulfide in the vapour phase and living cells" *New J. Chem.*, *39*, **2015**, 8940-8947.
 Impact Factor: 3.08; Citations: 04
- S. Das, S. Goswami, K. Aich, K. Ghoshal, C. K. Quah, M. Bhattacharyya, H.K. Fun "ESIPT and CHEF based highly sensitive and selective ratiometric sensor for Al³⁺ with imaging in human blood cells" New J. Chem., 39, 2015, 8582-8587. Impact Factor: 3.08; Citations: 01

- K. Aich, S. Goswami, S. Das, C. Das Mukhopadhyay, C. K. Quah, and H. K. Fun, Cd²⁺ Triggered the FRET "ON": A New Molecular Switch for the Ratiometric Detection of Cd²⁺ with Live-Cell Imaging and Bound X-ray Structure, *Inorg. Chem.*, *54*, **2015**, 7309-7315. **Impact Factor: 4.76; Citations: 04**
- 4) S. Paul, A. Manna and S. Goswami, <u>A differentially selective molecular probe for detection of trivalent ions</u> (Al³⁺, Cr³⁺ and Fe³⁺) upon single excitation in mixed aqueous medium, *Dalton Trans.*, 44, 2015, 11805-11810. Impact Factor: 4.19; Citations: 08
- 5) A. K. Das, S. Goswami, C. K. Quah and H.-K. Fun <u>Neighbouring group participation of thiol through</u> <u>aldehyde group assisted thiolysis of active ether: ratiometric and vapor phase fast detection of hydrogen</u> <u>sulfide in mixed aqueous media</u>, *New J. Chem.*, 39, 2015, 5669-5675. Impact Factor: 3.08; Citations: 02
- 6) S. Goswami, K. Aich, S. Das, B. Pakhira, K. Ghoshal, C. K. Quah, M. Bhattacharyya, H. K. Fun and S. Sarkar, A Triphenyl Amine-Based Solvatofluorochromic Dye for the Selective and Ratiometric Sensing of OCI[−] in Human Blood Cells, *Chem. Asian J.*, *10*, **2015**, 694-700. Impact Factor: **4.58**; Citations: **09**
- A. Manna and S. Goswami <u>Ratiometric detection of hypochlorite applying the restriction to 2-way ESIPT:</u> simple design for "naked-eye" tap water analysis, *New J. Chem.*, *39*, 2015, 4424-4429. Impact Factor: 3.08; Citations: 04
- A new ICT and CHEF based visible light excitable fluorescent probe easily detects in vivo Zn²⁺, K. Aich, S. Goswami, S. Das and C. D. Mukhopadhyay *RSC Adv.*, *5*, 2015, 31189-31194. Impact Factor: 3.84; Citations: 05
- 9) S. Goswami, S. Das and K. Aich <u>Fluorescent chemodosimeter based on spirobenzopyran for</u> organophosphorus nerve agent mimics (DCP), RSC Adv., 5, 2015, 28996-2900. Impact Factor: 3.84; Citations: 07
- S. Goswami, K. Aich, S. Das, C. D. Mukhopadhyay, D. Sarkar and T. K. Mondal, <u>A new visible-light-excitable ICT-CHEF-mediated fluorescence 'turn-on' probe for the selective detection of Cd²⁺ in a mixed aqueous system with live-cell imaging, *Dalton Trans.*, 44, 2015, 5763-5770. Impact Factor: 4.19; Citations: 09
 </u>
- Mousumi Mitra, Chiranjit Kulsi, Krishanu Chatterjee, Kajari Kargupta, Saibal Ganguly, Dipali Banerjee and Shyamaprosad Goswami, <u>Reduced graphene oxide-polyaniline composites—synthesis, characterization and</u> <u>optimization for thermoelectric applications</u> *RSC Adv.*, *5*, 2015, 31039-31048. Impact Factor: 3.84; Citations: 09
- 12) S. Goswami, A. K. Das, U. Saha, S. Maity, K. Khanra and N. Bhattacharyya <u>Rapid detection of hydrazine</u> in a naphthol-fused chromenyl loop and its effectiveness in human lung cancer cells: tuning remarkable <u>selectivity</u> via the reaction altered pathway supported by theoretical studies, Org. Biomol. Chem., 13, 2015, 2134-2139. Impact Factor: 3.56; Citations: 03
- 13) S. Goswami, S. Maity, A. C. Maity, A. K. Das, B. Pakhira, K. Khanra, N. Bhattacharyya and S. Sarkar, <u>ESIPT based Hg²⁺ and fluoride chemosensor for sensitive and selective 'turn on' red signal and cell imaging</u> *RSC Adv.*, 5, 2015, 5735-5740. Impact Factor: 3.84; Citations: 09

- 14) S. Goswami, S. Paul and A. Manna, <u>Fast and ratiometric "naked eye" detection of hydrazine for both solid</u> and vapour phase sensing, *New J. Chem.*, 39, 2015, 2300-2305. Impact Factor: 3.08; Citations: 06
- 15) B. N. Mongal, A. Pal, T.K. Mandal, **J Datta**, S. Naskar, "Synthesis, characterisation, electrochemical study and photovoltaic measurements of a new terpyridine and pyridine-quinoline based mixed chelate ruthenium dye", *Polyhedron*, **102**, **2015**, 615 Impact Factor: **2.011**; Citation: **01**
- A. Datta, A. Mondal, J. Datta, "Tuning of Platinum nano-particles by Au coverage in their binary alloy for direct ethanol fuel cell: Controlled synthesis, electrode kinetics and mechanistic interpretation", J. Power Source, 283, 2015, 104. Impact Factor: 6.217; Citation: 01
- 17) A. B. Ghosh, N. Saha, A. Sarkar, D. N. Srivastava, P. Paul, B. Adhikary, "Solvent assisted and solvent free orientation of growth of nanoscaled lanthanide sulfides: tuning of morphology and manifestation of photocatalytic behavior "*RSC Adv*, 2015, 5, 102818-102827. *Impact Factor-3.84*, Citation: Nil
- 18) N. Saha, A. Sarkar, A. B. Ghosh, A. K. Dutta, G. R. Bhadu, P. Paul, B. Adhikary, "Highly active spherical amorphous MoS₂: facile synthesis and application in photocatalytic degradation of rose bengal dye and hydrogenation of nitroarenes "*RSC Adv*, 5, 2015, 88848-88856. *Impact Factor-3.84*, Citation: Nil
- 19) A. Sarkar, A. B. Ghosh, N. Saha, A. K. Dutta, D. N. Srivastava, P. Paul, B. Adhikary, "Morphological tuning of Eu₂O₂S nanoparticles, manifestation of peroxidase-like activity and use in glucose assay "*Catal. Sci. Technol*, 5, 2015, 4055-4063. *Impact Factor-5.4*, Citation: 5
- 20) A Mondal, B Adhikary, D Mukherjee, "Room-temperature synthesis of air stable cobalt nanoparticles and their use as catalyst for methyl orange dye degradation "*Colloids. Surf.*, A, 482, 2015, 845-857. Impact Factor-2.11. Citation: Nil
- 21) G. Mondal, M. Acharjya, A. Santra, P. Bera, S. Jana, N. C. Pramanik, A. Mondal, P. Bera, "A new pyrazolyldithioate function in the precursor for the shape controlled growth of CdSnanocrystals: optical and photocatalytic activities" *New J. Chem.*, *39*, **2015**, 9487-9496, **Impact Factor-3.086**, **Citation: Nil**
- S. Jana, P. Mondal, S. Tripathi, A. Mondal, B. Chakraborty, "Electrochemical synthesis of FeS2 thin film: An effective material for peroxide sensing and terephthalic acid degradation", *J. Alloys and Compounds*, 646, 2015, 893-899, Impact Factor-2.999, Citation: Nil
- 23) G. Mondal, S. Jana, A. Santra, M. Acharjya, P. Bera, D. Chattopadhyay, A. Mondal, P. Bera, "Single-source mediated facile electrosynthesis of p-Cu2S thin films on TCO (SnO2:F) with enhanced photocatalytic activities", *RSC Adv.*, *5*, 2015, 52235-52242, Impact Factor-3.84, Citation : Nil.
- 24) A. Ghosh, A. Mondal, "A simple electrochemical route to deposit Cu7S4 thin films and their photocatalytic properties", *Applied Surface Science*, 328, 2015, 63–70, Impact Factor-2.71, Citation: 04
- 25) S. Naskar, B. Pakhira, D. Mishra, P. Mitra, S. K. Chattopadhyay, S. Naskar, "Synthesis, Characterization and theoretical studies of the heteroleptic Ruthenium (II) complexes of 2, 6 bis-(benzimidazolyl) pyridine" *Polyhedron*, 100, 2015, 170-179. Impact Factor: 2.011
- 26) P. Chakraborty, I. Majumder, H. Kara, S. K. Chattopadhyay, E. Zangrando, D. Das, "Azido bridge mediated catecholase activity, electrochemistry and magnetic behavior of a dinuclear copper (II) complex of

a phenol based "end-off" compartmental ligand" *Inorg. Chim. Acta* 436, 2015, 139-145 *Impact Factor:* 2.046; Citations: 02

- 27) G. Roymahapatra, T. Samanta, S. K. Seth, A. Mahapatra, S. K. Chattopadhyay, J. Dinda, "N, N'-Olefin Functionalized Bis-Imidazolium Pd(II) Chloride N-Heterocyclic Carbene Complex builds a supramolecular framework and shows catalytic efficacy for 'C-C' coupling reactions" *J. Chem. Sci.* 127, 2015, 1057-1065. *Impact Factor:* 1.298; Citations: 01
- 28) E. Zangrando D. Das, I. Majumder, P. Chakraborty, S. Das, H. Kara, S. K. Chattopadhyay, "Solvent dependent ligand transformation in a dinuclear copper (II) complex of a compartmental Mannich-base ligand: synthesis, characterization, bio-relevant catalytic promiscuity and magnetic study" RSC Advances 5, 2015, 51290-51301. *Impact Factor: 3.84*; Citations: 05
- 177) R. Sinha Roy, P. K. Nandi, "Exploring bridging effect on first hyperpolarizability" *RSC Adv.*, *5*, 2015, 103729 103738, *Impact Factor:* 3.84, Citations: 0
- 29) A. Mondal, K. Hatua, P.K. Nandi, "Static second hyperpolarizability of twisted ethylene: A comprehensive computational study" J. Theor. Comput. Chem., 14, 2015, 1550060-13. Impact Factor: 0.638; Citations: 0
- 30) P. Banerjee, P.K. Nandi, "Electronic structure and second hyperpolarizability of M(NA₂)₂ (M=Be,Mg,Ca; A=H,Li,Na) complexes" *Chem. Phys. Lett.*, 637, 2015, 164–171. *Impact Factor: 2.337*; Citations: 1
- K. Hatua, P.K. Nandi, "Diradical character and second hyperpolarizability of multidecker inverse sandwich complexes of Mg and Ca" *Chem. Phys. Lett.*, 628, 2015, 1–8. *Impact Factor: 2.337*; Citations: 0
- K. Hatua, P.K. Nandi, "Second Hyperpolarizability of Delta Shaped Disubstituted Acetylene Complexes of Beryllium, Magnesium and Calcium" *J. Mol.* Model, 254, 2015, 1-9. *Impact Factor:* 1.736; Citations: 1
- 33) K. Hatua, P.K. Nandi, "Second hyperpolarizability of multimetallocenes [Cp–M_n–Cp] of Be, Mg and Ca" J. *Theor. Comput. Chem.*, 14, 2015, 15500021-20. *Impact Factor: 0.638*; Citations: 1
- 34) P. K. Nandi, K. Hatua, A. K. Bansh, N. Panja, T. K. Ghanty, "Structure- Property Correlation Study Through Sum-Over-State Approach" AIP Conf. Proc., 1642, 2015, 526 - 529. Citations: 0
- 35) D. Jana, B. K. Ghorai, "Side substituent dependence of photophysical properties of 9-arylanthracene based π -conjugates", *Bull. Chem. Soc. Jpn.*, 88, 2015, 89–96. Impact factor: 2.21, Citations: Nil
- 36) D. Jana, S. Boxi, P. P. Parui, B. K. Ghorai, "Planar-Rotor architecture based pyrene-vinyltetraphenylethylene conjugated systems: photophysical properties and aggregation behavior", Org. Biomol. Chem., 13, 2015, 10663–10674. Impact factor: 3.562, Citations: Nil
- 37) N. Pradhan, D. Jana, B. K. Ghorai, N. Jana, "Detection and Monitoring of Amyloid Fibrillation Using Fluorescence 'Switch-On' Probe" ACS Appl. Mater. Interfaces, 7, 2015, 25813–25820. Impact factor: 6.723, Citations: 1
- 38) A. K. Mahapatra, S. Mondal, S. K. Manna, K. Maiti, R. Maji, S. S. Ali, D. Mandal S. Mandal and Md R. Uddin, Reaction-based sensing of fluoride ions using desilylation method for triggering excited-state intramolecular proton transfer, *Supramolecular Chemistry*, 2015, [DOI: 10.1080/10610278.2015.1122195.] Impact factor: 2.394, Citations: Nil

- 39) A. K. Mahapatra, S. S. Ali, K. Maiti, S. K. Manna, R. Maji, S. Mondal, Md. R. Uddin, S. Mandal and P.Sahoo, Aminomethylpyrene-based imino-phenols as primary fluorescence switch-on sensors for Al³⁺ in solution and in Vero cells and their complexes as secondary recognition ensembles toward pyrophosphate, *RSC Advances*, 5, 2015, 81203–81211. Impact factor: 3.84, Citations: 2
- 40) A. K. Mahapatra, R. Maji, K. Maiti, S. K. Manna, S. Mondal, S. S. Ali, S. Manna, P. Sahoo, S. Mandal, Md R. Uddin and D. Mandal, A BODIPY/pyrene-based chemodosimetric fluorescent chemosensor for selective sensing of hydrazine in the gas and aqueous solution state and its imaging in living cells. *RSC Advances 5*, 2015, 58228-58236. Impact factor: 3.84, Citations: 4
- A. K. Mahapatra, K. Maiti, S. K. Manna, R. Maji, S. Mondal, C. D. Mukhopadhyay, P. Sahoo and D. Mandal, A cyclization-induced emission enhancement (CIEE)-based ratiometric fluorogenic and chromogenic probe for the facile detection of a nerve agent simulant DCP, *Chemical Communications*, *51*, 2015, 9729 9732. Impact factor: 6.834, Citations: 5
- A. K. Mahapatra, P. Karmakar, J. Roy, S. Manna, K. Maiti, P. Sahoo and D. Mandal, Colorimetric and Ratiometric Fluorescent Chemosensor for Fluoride Ion Based on Phenanthroimidazole (PI): Spectroscopic, NMR and Density Functional Studies, *RSC Advances 5*, 2015, 37935-37942. Impact factor: 3.84, Citations: 7
- 43) A. K. Mahapatra, S. K. Manna, K. Maiti, S. Mondal, R. Maji, D. Mandal, S. Mandal, Md. R. Uddin, S. Goswami, C. K. Quah and H. K. Fun, An azodye–rhodamine-based fluorescent and colorimetric probe specific for the detection of Pd²⁺ in aqueous ethanolic solution: synthesis, XRD characterization, computational studies and imaging in live cells, *Analyst*, 140, 2015, 1229-1236. Impact factor: 4.107, Citations: 10
- A. K. Mahapatra, S. Mondal, S. K. Manna, K. Maiti, R. Maji, Md. R. Uddin, S. Mandal, D. Sarkar, T. K. Mondal and D. K. Maiti, A new selective chromogenic and turn-on fluorogenic probe for copper(II) in solution and vero cells: recognition of sulphide by [CuL], *Dalton Transactions* 44, 2015, 6490-6501. Impact factor: 4.197, Citations: 5
- 45) A. K. Mahapatra, K. Maiti, R. Maji, S. K. Manna, S. Mondal, S. S. Ali and S. Manna, Ratiometric fluorescent and chromogenic chemodosimeter for cyanide detection in water and its application in bioimaging, *RSC Advances 5*, 2015, 24274-24280. Impact factor: 3.84, Citations: 7
- 46) A. K. Mahapatra, S. K. Manna, B. Pramanik, K. Maiti, S. Mondal, S. S. Ali and D. Mondal, Colorimetric and Ratiometric Fluorescent Chemodosimeter for Selective Sensing of Fluoride and Cyanide Ion: Tuning Selectivity in Proton Transfer and C-Si Bond Cleavage, *RSC Advances 5*, 2015, 10716-10722. Impact factor: 3.84, Citations: 8
- 47) A. K. Mahapatra, R. Maji, K. Maiti, S. K. Manna, S. Mondal, C. D. Mukhopadhyay, S. Goswami, D. Sarkar, T. K Mondal, C. K. Quah and H. K. Fun, Synthesis and Anion Sensing Properties of Novel N,O-Chelated Perimidine-BF Complex, *Sensors & Actuators: B. Chemical* 207, 2015, 878-886. Impact factor: 4.097, Citations: 5

- S. Chattopadhyay, R. K. Chaudhuri, and U. S. Mahapatra, "State-specific multireference perturbation theory with improved virtual orbitals: Revisiting the ground state of F₂, Be₂, and N₂", *J. Comp. Chem.*, 36, (2015), 907-925, Impact factor = 3.589. Google Scholar Citation: 3
- 49) U. S., Mahapatra, D. Banerjee, R. K. Chaudhuri, and S. Chattopadhyay, "Profiling the binding motif between Be and Mg in the ground state via a single-reference coupled cluster method", *Mol. Phys.*, *113*, 2015,1387-1395, Impact factor = 1.720. Google Scholar Citation:4
- 50) A. Sharma, S. Chattopadhyay, K. Adhikari, and D. Sinha, "Spectroscopic constants relating to ionization from the strongest bonding and inner valence molecular orbital $2\sigma_g$ of N₂ : An EIP-VUMRCC search", **Chem. Phys. Lett.**, *634*, **2015**, 88–94, **Impact factor = 1.963. Google Scholar Citation: 2**
- 51) A. Ghosh, R. K. Chaudhuri, S. Chattopadhyay, and U. S. Mahapatra, "Relativistic state-specific multireference perturbation theory incorporating improved virtual orbitals: Application to theground state single-bond dissociation", J. Com. Chem., *36*, 2015, 1954-1972, Impact factor = 3.589. Google Scholar Citation: 4
- 52) S. Chattopadhyay, R. K. Chaudhuri, U. S. Mahapatra, A. Ghosh, S. Sinha Ray, "State-specific multireference perturbation theory: Development and present status", WIREs ComputMolSci2016, (2015), doi: 10.1002/wcms.1248 (Invited Advanced Review Article), Impact factor =11.885. Google Scholar Citation: 0
- 53) P. Sarkar, A. Shit, **S. Chattopadhyay**, and S. Banik, "Profiling the overdamped dynamics of a nonadiabatic system", *Chemical Physics*, 458, **2015**), 86–91, **Impact factor = 1.696. Google Scholar Citation: 1**
- 54) T. Mapder, S. Talukdar, S. Chattopadhyay, and S. Banik, "Deciphering parameter sensitivity in the BvgAS signal transduction", PLoS ONE, 11, 2015, e0147281, doi:10.1371/journal.pone.0147281, Impact factor = 3.234. Google Scholar Citation:01
- 55) S. Banerjee, A. K. Saha, B. Show, J.Ganguly, R. Bhattacharyay, S. K. Datta, H. Saha and N. Mukherjee, "A regular rippled pattern formed by the molecular self-organization of polyvinylpyrrolidone encapsulated Ag nanoparticles: a high transmissive coating for efficiency enhancement of c-Si solar cells", *RSC Advances*, 5, 2015, 5667. Impact factor 3.8 Citations 01
- 56) S. Maity, A. Datta, S.Lahiri and J. Ganguly "Synthesis of New Greener Biopolymer Chitosan Based Hydrogel and Its Application for Separation of ¹⁵²Eu and ¹³⁷Cs", *NUCAR*, 2015 (Full Proceeding), Mumbai, India.
- 57) J. Biswas, J. Ganguly, A. k. Paul, "Partial characterization of an extracellular polysaccharide produced by a moderately halophilic bacterium Halomonasxianhensis SUR308 (GBIF-2015-0113), 10.1080/08927014.2015.1106479", 2015Biofouling: The Journal of Bioadhesion and Biofilm Research, , 9-10, 2015735-744. Impact factor 3.84, Citations: nil
- 58) S. Basu, P. Maji, J. Ganguly, "Biosynthesis, Characterization and Antimicrobial activity of Silver and Gold nanoparticles by Dolichosbiflorus Linn seed extract" *Journal of Experimental Nanoscience*, 2015. Impact factor 0.84 Citations: nil

- 59) S. Maity, A. Dutta, S.Lahiri, J. Ganguly, "Selective Separation of 152Eu from a Mixture of 152Euand 137Cs Using Chitosan Based Hydrogel" *RSC Advances*5, 2015, 89338-89345. Impact factor 3.8 Citations nil
- 60) P. Hajra, S. Shyamal, A. Bera, H. Mandal, D. Sariket, M. Kundu, S. Pande, C. Bhattacharya, "Optimization of Triton-X 100 surfactant in the development of Bismuth Oxide thin film semiconductor for improved photoelectrochemical water oxidation behaviour" *Electrochimica Acta*, *185*, 2015, 229–235. Impact Factor: 4.504; Citations: NIL
- 61) S. Shyamal, P. Hajra, H. Mandal, J. K. Singh, A.K. Satpati, S. Pande, and C. Bhattacharya, "Effect of substrates on the photoelectrochemical reduction of water over cathodically electrodeposited p-Type Cu₂O Thin Films", *ACS Applied Materials and Interface;* 7, 2015, 18344-18352. Impact Factor: 6.723; Citations: 02
- 62) Suvendu Samanta and Papu Biswas, Metal free visible light driven oxidation of alcohols to carbonyl derivatives using 3,6-di(pyridin-2-yl)-1,2,4,5-tetrazine (pytz) as catalyst. *RSC Adv.*, 5, 2015, 84328–84333, Impact Factor = 3.84, Citation = 02.
- 63) Sudipto Das, SuvenduSamanta, Shounak Ray and **Papu Biswas**. 3,6-Di(pyridin-2-yl)-1,2,4,5-tetrazine capped Pd(0) nanoparticles: a catalyst for copper-free Sonogashira coupling of aryl halides in aqueous medium. *RSC Adv.*, 5, **2015**, 75263–75267, **Impact Factor = 3.84, Citation = 0.**
- 64) S. Samanta, P. K. Samanta and P. Biswas. "An abiotic receptor and its Cu(ll) complex as selective 'turn-off' chemosensor for bisulphate ion." *Spectrochimicaacta part A: Molecular and Biomolecular Spectroscopy*, 147, 2015, 262-269, Impact Factor = 2.353, Citation = 02.
- 65) S. Samanta, A. K. Dutta, P. Biswas. "Supramolecular interactions in mononuclear iron(III) complex derived from a diamide ligand: spectroscopic and electrochemical properties". *Indian Journal of Chemistry* 54A, 2015, 478-483, Impact Factor = 0.851, Citation = 0.
- 66) N. Majumdar, Nanda D. Paul, S. Mandal, B. de Bruin, William D. Wulff, "<u>Catalytic Synthesis of 2H-Chromenes</u>" ACS Catal., 2015, 5, 2329-2366. Citations: 08
- 67) Z. Tang, S. Mandal, Nanda D. Paul, M. Lutz, P. Li, J. I. van der Vlugt and B. de Bruin, "Rhodium catalysed conversion of carbenes into ketenes and ketene imines using PNN pincer complexes" Org. Chem. Front., 2015, 2, 1561-1577. Impact factor: 0, Citations: 03
- 68) D. Ganguly, J. Chen, "Modulation of the Disordered Conformational Ensembles of the p53 Transactivation Domain by Cancer-Associated Mutation" *PLoS. Comput. Biol.* 11, 2015, e1004247. Impact Factor: 4.867, Citations: Nil
- 69) H. Huang, D. Ganguly, J. Chen, X. S. Sun "Conformational Flexibility and pH Effects on Anisotropic Growth of Sheet-Like Assembly of Amphiphilic Peptides" J. Nanosci Nanotech 15, 2015, 4470-4479. Impact Factor: 1.339, Citations: Nil

List of Publications for the Year 2014

- 70) S. Goswami, A. Manna, M. Mondal and D. Sarkar Cascade reaction-based rapid and ratiometric detection of H₂S/S²⁻ in the presence of bio-thiols with live cell imaging: demasking of ESIPT approach, *RSC Adv.*, *4*, 2014, 62639-62643. Impact Factor: 3.84; Citations: 16
- 71) S. Goswami, S. Chakraborty, M. K. Adak, S. Halder, C. K. Quah, H. K. Fun, B. Pakhira and S. Sarkar A highly selective ratiometric chemosensor for Ni²⁺ in a quinoxaline matrix, *New J. Chem.*, *38*, **2014**, 6230-6235. Impact Factor: **3.08**; Citations: **02**
- 72) S. Goswami, R. Chakrabarty, S. Dey and H. K. Fun, Steric inhibition of hydrogen bonding in molecular recognition of dicarboxylic acids: di-topic receptors containing a nitro group designed to behave like monotopic receptors, *RSC Adv.*, *4*, 2014, 49663-49671. Impact Factor: 3.84; Citations: 00
- 73) S. Goswami, S. Maity, A. C. Maity, A. K. Das, Fluorometric and naked-eye detectable dual signaling chemodosimeter for hypochlorite, *Sens. Actuators B*, 204, 2014, 741-745. Impact Factor: 4.09; Citations: 07
- 74) S. Goswami, S. Maity, A. C. Maity, A. K. Das, K. Khanra, T. K. Mandal, N. Bhattacharyya, A macrocyclic piperazine linked extremely Zn²⁺ selective fluorescent chemosensor with bio-imaging and for H₂PO₄⁻ sensing, *Tetrahedron Lett.*, 55, 2014, 5993-5997. Impact Factor: 2.37; Citations: 02
- 75) S. Goswami, S. Paul and A. Manna, Rapid and ratiometric sensor for CAN (Ce⁴⁺) through metal assisted oxidation reaction-altered through bond energy transfer (TBET): development of low cost devices (TLC plate sticks) *RSC Adv.*, *4*, 2014, 43778-43784. Impact Factor: 3.84; Citations: 02
- 76) S. Goswami, A. Manna, S. Paul, A. K. Maity, P. Saha, C. K. Quah and H. K. Fun FRET based 'red-switch' for Al³⁺ over ESIPT based 'green-switch' for Zn²⁺: dual channel detection with live-cell imaging on a dyad platform, *RSC Adv.*, *4*, 2014, 34572-34576. Impact Factor: 3.84; Citations: 29
- 77) S. Goswami, A. K. Das, B. Pakhira, S. B. Roy, A. K. Maity, P. Saha and S. Sarkar, Pyrophosphate selective fluorescent chemosensors: cascade recognition of nuclear stain mimicking DAPI. *Dalton Trans.*, 43, 2014, 12689-12697. Impact Factor: 4.19; Citations: 10
- 78) S. Goswami, S. Paul and A. Manna, FRET based selective and ratiometric 'naked-eye' detection of CN⁻ in aqueous solution on fluorescein–Zn–naphthalene ensemble platform, *Tetrahedron Lett.*, 55, 2014, 3946-3949. Impact Factor: 2.37; Citations: 10
- 79) S. Goswami, A. K. Das, A. Manna, A. K. Maity, P. Saha, C. K. Quah, H. –K. Fun, and H. A. Abdel-Aziz, Nanomolar Detection of Hypochlorite by a Rhodamine-Based Chiral Hydrazide in Absolute Aqueous Media: Application in Tap Water Analysis with Live-Cell Imaging, *Anal. Chem*, 86, 2014, 6315–6322. Impact Factor: 5.63; Citations: 22

- 80) S. Goswami, S. Das, K. Aich, P. K. Nandi, K. Ghoshal, C. K. Quah, M. Bhattacharyya, Hoong-Kun Fun and Hatem A. Abdel-Aziz, A rhodamine–quinoline based chemodosimeter capable of recognising endogenous OCl⁻ in human blood cells, *RSC Adv.*, *4*, 2014, 24881-24886. Impact Factor: 3.84; Citations: 05
- S. Goswami, A. Manna and S. Paul, Rapid 'Naked eye' response of DCP, a nerve agent simulant: from molecules to low cost devices for both liquid and vapour phase detection, *RSC Adv.*, *4*, 2014, 21984-21988.
 Impact Factor: 3.84; Citations: 09
- 82) S. Goswami, S. Chakraborty, A. K. Das, A. Manna, A. Bhattacharyya, C. Kheng Quah and H. K. Fun Selective Colorimetric and Ratiometric Probe for Ni(II) in Quinoxaline Matrix with the Single Crystal X-ray Structure, *RSC Adv.*, *4*, 2014, 20922-20926. Impact Factor: 3.84; Citations: 01
- 83) S. Goswami, S. Chakraborty, S. Paul, S. Halder, S. Panja and S. Kanti Mukhopadhyay, A new pyrene based highly sensitive fluorescence probe for copper(II) and fluoride with living cell application, *Org. Biomol. Chem.*, 12, 2014, 3037-3044. Impact Factor: 3.56; Citations: 11
- 84) S. Goswami, K. Aich, S. Das, S. B. Roy, B. Pakhira and S. Sarkar, A reaction based colorimetric as well as fluorescence '*turn on*' probe for the rapid detection of hydrazine *RSC Adv.*, *4*, 2014, 14210-14214. Impact Factor: 3.84; Citations: 19
- 85) S. Goswami, S. Maity, A. C. Maity, A. K. Maity, A. K. Das, Partha Saha, A FRET-based rhodaminebenzimidazole conjugate as a Cu²⁺-selective colorimetric and ratiometric fluorescence probe that functions as a cytoplasm marker, *RSC Adv.*, *4*, 2014, 6300-6305. Impact Factor: 3.84; Citations: 10
- S. Dey, D. Sain, S. Goswami, Naphthyridine based fluorescent receptors for the recognition of uric acid, *RSC Adv.*, *4*, 2014, 428-433. Impact Factor: 3.84; Citations: 07
- 87) S. Goswami, A. K. Das, A. K. Maity, A. Manna, K. Aich, S. Maity, P. Saha, T. K. Mandal, Visual and near IR (NIR) fluorescence detection of Cr³⁺ in aqueous media *via* spirobenzopyran ring opening with application in logic gate and bio-imaging, *Dalton Trans.*, 43, 2014, 231-239. Impact Factor: 4.19; Citations: 17
- 88) S Goswami, A Manna, S. Paul, A. K. Das, P. K. Nandi, A. K. Maity, P. Saha, A turn on ESIPT probe for rapid and ratiometric fluorogenic detection of homocysteine and cysteine in water with live cell-imaging, *Tetrahedron Lett.*, 55, 2014, 490-494. Impact Factor: 2.37; Citations: 19
- S. Goswami, S. Das, K. Aich, D. Sarkar, T. K. Mondal, A coumarin based chemodosimetric probe for ratiometric detection of hydrazine, *Tetrahedron Lett.*, 55, 2014, 2695-2699. Impact Factor: 2.37; Citations: 11

- 90) S. Goswami, A. K. Das, A. Manna, A. K. Maity, H.-K. Fun, C. K. Quah, P. Saha, A colorimetric and ratiometric fluorescent turn-on fluoride chemodosimeter and application in live cell imaging: high selectivity via specific Si_O cleavage in semi aqueous media and prompt recovery of ESIPT along with the X-ray structures, *Tetrahedron Lett.*, 55, 2014, 2633-2638. Impact Factor: 2.37; Citations: 21
- 91) S Goswami, M K Das, A Manna, Pterin-based highly selective, ratiometric, and sensitive 'naked-eye' sensor for acetate, *Tetrahedron Lett.*, 55, 2014, 2707-2710. Impact Factor: 2.37; Citations: 09
- 92) S. Goswami, A K Das, K Aich, A Manna, H-K Fun & C K Quah "Single sensor for multiple analytes: fluorogenic detection of Al³⁺ in aqueous media and AcO⁻ in organic media" *Supramol. Chem.*, 2014, 94-104. Impact Factor: 2.39; Citations: 14
- 93) P. Hazra, A. Jana, M. Hazra, J. Datta, "Studies on the photo-electrochemical behaviour of Bi₂S₃NPs embedded in a PANINFs matrix", *RSC Advance*, 4, 2014, 33662-33671 Impact Factor: 3.84; Citation: 03
- 94) A. Dutta, J. Datta*, Energy efficient role of Ni/NiO in PdNi nano catalyst used in alkaline DEFC, J. Mater.
 Chem. A, 2, 2014, 3237. Impact Factor: 7.443; Citation: 22
- 95) A. K. Mandal, A. Jana, A. Datta, P. M. Sarma, B. Lal, J. Datta, "Monitoring ground water quality and heavy metals in soil during large scale bioremediation of petroleum hydrocarbon contaminated waste in India: case studies", J. Natural Resources and Development, 4, 2014, 64-75.
- 96) A. K. Mandal, P. M. Sarma, C P. Jeyaseelan, B Singh, B. Lal, J. Datta, Large Scale Bioremidiation of Petroleum Hydrocarbon Contaminated Waste at various Installation of ONGC, India, Environmental Research, Engineering and Management, 68, 2014, 41-52.
- 97) A. K. Dutta, S. K. Maji, K. Mitra, A. Sarkar, N. Saha, A. B. Ghosh, B. Adhikary, "Single source precursor approach to the synthesis of Bi2S3 nanoparticles: A new amperometric hydrogen peroxide biosensor "Sens. Actuat. B Chem, 192, 2014, 578-585, Impact Factor-4.10, Citation: 8
- 98) A. K. Dutta, S. K. Maji, B. Adhikary, " γ-Fe₂O₃ nanoparticles: An easily recoverable effective photocatalyst for the degradation of rose bengal and methylene blue dyes in the waste-water treatment plant " *Mat. Res. Bull*, 2014, 49, 28-34, *Impact Factor-2.29*, Citation: 18.
- 99) A Mondal, A Das, B Adhikary, DK Mukherjee, "Palladium nanoparticles in ionic liquids: reusable catalysts for aerobic oxidation of alcohols " *J. Nanopart. Res*, *16*, 2014, 1-10. *Impact Factor-2.18*, Citation: 5.
- 100) A K Dutta, S Das, PK Samanta, S Roy, B Adhikary, P Biswas, "Non-enzymatic amperometric sensing of hydrogen peroxide at a CuS modified electrode for the determination of urine H 2 O 2 " *Electrochimica*. *Acta*, 144, 2014, 282-287, *Impact Factor-4.5*, Citation: 6.
- B. Show, N. Mukherjee, A. Mondal, "Electrochemically synthesized microcrystalline tin sulphide thin films: high dielectric stability with lesser relaxation time and efficient photochemical and photoelectrochemical properties", *RSC Adv.*, *4*, 2014, 58740–58751. Impact factor: 3.84, Citations: 01

- S. Jana and A. Mondal, "Fabrication of SnO2/α-Fe2O3, SnO2/α-Fe2O3–PB Heterostructure Thin Films: Enhanced Photodegradation and Peroxide Sensing", *ACS Appl. Mater. Interfaces*, *6*, **2014**, 15832–15840.
 Impact factor: 6.723, Citations: 12
- 103) A. Ghosh, B. Show, S. Ghosh, N. Mukherjee, G. Bhattacharya, S. K. Datta and A. Mondal,
 "Electrochemical synthesis of p-CuO thin films and development of a p-CuO/n-ZnOheterojunction and its application as a selective gas sensor", *RSC Adv.*, *4*, 2014, 51569–51575. Impact factor: 3.84, Citations: 04
- S. Jana, P. Bera, B. Chakraborty, B. C. Mitra, A. Mondal, "Impact of annealing on the electrodeposited WS2 thin films: Enhanced photodegradation of coupled semiconductor", *Applied Surface Science*, *317*,2014, 154–159. Impact factor: 2.71, Citations: 04
- 105) S. Jana, S. Samai, B. C. Mitra, P. Bera, A. Mondal, "Nickel oxide thin film from electrodeposited nickel sulfide thin film: peroxide sensing and photo-decomposition of phenol", *Dalton Trans.*, 43, 2014, 13096– 13104, . Impact factor: 4.197, Citations: 06
- 106) G. Mondal, P. Bera, A. Santra, S. Jana, T. Mondal, A. Mondal, S. I. Seok, P. Bera, "Precursor driven selective synthesis of hexagonal chalcocite (Cu2S) nanocrystals : Structural, optical, electrical and photo catalytic properties", *New J. Chem.*, *38*, **2014**, 4774—4782. **Impact factor:** 3.086, **Citations:** 02
- 107) S. Jana, G. Mondal, B. C. Mitra, P. Bera, A. Mondal, "Synthesis, characterization and electrocatalytic activity of SnO2, Pt-SnO2 thin films for methanol oxidation", *Chemical Physics*, 439, 2014, 44–48,. Impact factor: 1.652, Citations: 02
- 108) S. Jana, B. C. Mitra, P. Bera, M. Sikdar, A. Mondal, "Photocatalytic activity of galvanically synthesized nanostructure SnO2 thin films", *J. Alloys and Compounds*, 602, 2014, 42–48. Impact factor: 2.999, Citations: 08
- S. Jana, N. Mukherjee, B. Chakraborty, B. C. Mitra, A. Mondal, "Electrodeposited polymer encapsulated nickel sulphide thin films: frequency switching material", *Applied Surface Science*, *300*, **2014**, 154–158.
 Impact factor: 2.71, Citations: 07
- 110) 14.S. Jana, S. Das, D. De, U. Gangopadhyay, P. Ghosh, A. Mondal, "Effect of annealing on structural and optical properties of diamond-like nanocomposite thin films", *Appl Phys A*, 114, 2014, 965–972. Impact factor: 1.7, Citations: Nil
- 111)C. Das, P. Adak, S. Mondal, R. Sekiya, R. Kuroda, S. I. Gorelsky, S. K. Chattopadhyay, "Synthesis, characterization, X-ray crystal structure, DFT calculations and catalytic properties of a dioxidovanadium(V) complex derived from oxamohydrazide and pyridoxal: a model complex of vanadium dependent bromoperoxidase" *Inorg. Chem.* 2014, *53*, 11426-11437. *Impact Factor:* 4.762; Citations: 04
- 112) P. Chakraborty, J. Adhikary, B. Ghosh, R. Sanyal, S. K. Chattopadhyay, A. Bauzá, A. Frontera, E. Zangrando, D. Das, "Relation between the catalytic efficiency of the synthetic analogues of catechol oxidase with their electrochemical property in the State and substrate-bound state" *Inorg. Chem.* 53, 2014, 8257-8269. *Impact Factor:* 4.762; Citations: 10

- 113) S. Mondal, P. Adak, C. Das, S. Naskar, B. Pakhira, A. J. Blake, A. L. Rheingold, E. Sinn, C. S. Eribal, S. K. Chattopadhyay, "Synthesis, X-ray structures, spectroscopic and electrochemical studies of Zn(II), Cd(II), Ni(II) and Mn(II) complexes of N¹,N⁴-bis(pyridoxylidene)triethylenetetramine" *Polyhedron*, 81, 2014, 428-435. *Impact Factor: 2.011*; Citations: 02
- 114) S. Mondal, C. Das, B. Ghosh, B. Pakhira, A. J. Blake, M. G. B. Drew, S. K. Chattopadhyay, "Synthesis, spectroscopic studies, X-ray crystal structures, electrochemical properties and DFT calculations of three Ni (II) complexes of aroyl hydrazone ligands bearing anthracene moiety" *Polyhedron*, 80, 2014, 272-281 (*invited publication for Prof. V. M. Leovac special issue*). Impact Factor: 2.011
- 115) T. Samanta, L. Dey, J. Dinda, S. K. Chattopadhyay, S. Seth, "Cooperativity of anion... π and π ... π interactions regulates the self-assembly of a series of carbene proligands: Towards quantitative analysis of intermolecular interactions with Hirshfeld surface" *J. Mol. Str. 1068*, 2014, 58-70. *Impact Factor: 1.602*; Citations: 10
- 116) B. Ghosh, S. Naskar, S. Naskar, A. Espinosa, S. C. K. Hau, T. C. W. Mak, R. Sekiya, R. Kuroda, S. K. Chattopadhyay, "Heteroleptic Ru(II) complexes containing aroyl hydrazone and 2,2-bipyridyl: Synthesis, X-ray crystal structures, electrochemical and DFT studies" *Polyhedron*, 72, 2014, 115-121. *Impact Factor:* 2.011; Citations: 02
- 117) J. Dinda, T. Samanta, A. Nandy, K. Das Saha, S. Seth, S. K. Chattopadhyay, C. W. Bielawski, "Nheterocyclic carbene supported Au(I) and Au(III) complexes: a comparison of cytotoxicities" *New. J. Chem.*, 38, 2014, 1218-1224. *Impact Factor: 2.046*; Citations: 07
- 118) T. Samanta, S. K. Seth, S. K. Chattopadhyay, P. Mitra, V. Kushwah, J. Dinda, "Synthesis, structures and catalysis of Pd(II)–N-heterocyclic carbine complexes of pyridine/pyrimidine wingtip substituted ligand" *Inorg. Chim. Acta*, 411, 2014, 165-171. *Impact Factor:* 4.762; Citations: 22
- 119)K. Hatua, P.K. Nandi, "Double Coned Inverse Sandwich Complexes [M-(η⁴-C₄H₄)-M'] of Gr-IA and Gr-IIA Metals: Theoretical Study of Electronic of Structure and Second Hyperpolarizabilit" J. Mol. Model., 20, 2014, 2440 -2449. *Impact Factor: 1.736*; Citations: 6
- 120) K. Hatua, P.K. Nandi, "Static Second Hyperpolarizability of Λ Shaped Alkaline Earth Metal Complexes" J. *Theor. Comput. Chem.*, 13, 2014, 14500391- 12. *Impact Factor: 0.638*; Citations: 1
- 121)S. K. Sau, T.K. Manna, A. Giri, P.K. Nandi, "Kinetic model of batch bio-methanation on predigested agricultural wasted using human urine" *Int. J. Sc., Eng. Tech.*, 2, 2014, 1415-1421. *Impact Factor: 3.25*; Citations: 0
- 122) S. K. Sau, T.K. Manna, A. Giri, P.K. Nandi, "Enhancement of biogas production from predigested substrate by human urine under different thermal condition" *Int. J. Eng. Inn. Tech.*, 4, 2014, 71-77. *Impact Factor:* 1.895; Citations: 1
- 123) S. K. Sau, A. Giri, T. K. Manna, P.K. Nandi, "Effect of thermo-chemical pretreatment on vegetable wastes (cabbage and potato) for biogas production" *Int. J. Adv. Tech. Eng. Sc.*, 2, 2014, 229 234. *Impact Factor: 1.012*; Citations: 0

- 124) D. Jana, B. K. Ghorai, "Hexaphenylbenzene end-capped tri(p-phenylenevinylene): Synthesis and properties", *Tetrahedron Lett.* 55, 2014, 5203–5206. Impact factor: 2.379, Citations: 2
- 125) A. K. Mahapatra, S. Mondal, K. Maiti, S. K. Manna, R. Maji, S. Mandal, S. Goswami, D. Mondal, C. K. Quah and H. K. Fun, A pyrene thiazole conjugate as a ratiometric chemosensor with high selectivity and sensitivity for tin (Sn⁴⁺) and its application in imaging live cells, *RSC Advances 4*, 2014, 56605-56614. Impact factor: 3.84, Citations: 9
- 126) A. K. Mahapatra, K. Maiti, S. K. Manna, R. Maji, C. D. Mukhopadhyay, B. Pakhira, S. Sarkar, Unique fluorogenic 'ratiometric' fluorescent chemodosimeter for rapid sensing of CN⁻ in water, *Chemistry–An Asian Journal*, 9, 2014, 3623. Impact factor: 4.95, Citations: 16
- 127) A. K. Mahapatra, S. K. Manna, K. Maiti, R. Maji, C. D. Mukhopadhyay, D. Sarkar, T. K. Mondal, Imino-phenolic-azodye appended rhodamine as a primary fluorescence "off-on" chemosensor for tin (Sn4+) in solution and in RAW cells and the recognition of sulphide by [AR-Sn], *RSC Adv.*, *4*, 2014, 36615-36622. Impact factor: 3.84, Citations: 12
- 128) A. K. Mahapatra, S. K. Manna, C. D. Mukhopadhyay and D. Mandal, Pyrophosphate-selective fluorescent chemosensor based onratiometric tripodal-Zn(II) complex: Application in logic gates and living cells, *Sensors and Actuators B: Chemical*, 200, 2014, 123-131. Impact factor: 4.097, Citations: 10
- 129) A. K. Mahapatra, R. Maji, K. Maiti, S. S. Adhikari, C. D. Mukhopadhyay and D. Mandal, Ratiometric sensing of fluoride and acetate anions based on a BODIPY-azaindole platform and its application to living cell imaging, *Analyst*, 139, 2014, 309-317. Impact factor: 4.107, Citations: 11
- 130) P. Mohan, A. Mangalam, S. Chattopadhyay, "Parametric models of the periodogram", J. Astrophysics & Astronomy, Special Issue (Proceedings of a meeting entitled "Variability of Blazars: From Jansky to Fermi" held in Guangzhou, China, December 14–16, 2012), Edited by J. H. Fan, Y. Liu, A. C. Gupta, & Z. Q. Shen., (2014). Google Scholar Citation: 3
- 131)S. Chattopadhyay, U. S. Mahapatra, and R. K. Chaudhuri, "Dissociation of homonuclear diatomic halogens via Multireference coupled cluster study", *Mol. Phys.*, 112, (2014), 2720, Impact factor = 1.720. Google Scholar Citation: 3
- 132) D. Banerjee, A. Ghosh, S. Chattopadhyay, P. Ghosh, and R. K. Chaudhuri, "Reinvestigating the ``*cis*-effect" in 1,2-difluoro derivatives of ethylene and diazene using *abinitio*multireference method", *Mol. Phys.*, 112, (2014), 3206, Impact factor = 1.720. Google Scholar Citation: 3
- 133) A. Shit, S.Chattopadhyay, and J.Ray Chaudhuri, "Taming the escape dynamics of nonadiabatic time-periodically driven quantum dissipative system within the frame of Wigner formalism", *Chem. Phys.*, 431, (2014), 26, Impact factor = 1.696. Google Scholar Citation: 3
- 134) P.Sarkar, K. A.Maity, A. Shit, S. Chattopadhyay, S. K.Banik, and J.Ray Chaudhuri, "Controlling mobility via rapidly oscillating time-periodic stimulus", *Chem. Phys. Lett.*, 602,(2014), 4, Impact factor = 1.963. Google Scholar Citation: 3

- 135) M. Bhatnagar, L. Parwani, Vinay Sharma, J. Ganguly, A.Bhatnagar. ".Exopolymers from Tolypothrixtenuisand three *Anabaena sp.*(Cyanobacteriaceae) as novel blood clotting agents for wound management", *Carbohydrate Polymers*, 99, 2014, 692–699. Impact factor 4.07 Citations 08
- 136) M.Packiam, R. Yedery, Afrin A Begum, Russell W Carlson, J. Ganguly, Gregory D Sempowski, Melissa S Ventevogel, W. M Shafer, Ann E Jerse. "Phosphoethanolamine Decoration of *Neisseria gonorrhoeae* Lipid A Plays a Dual Immunostimulatory and Protective Role during Experimental Genital Tract Infection", Infection and immunity, 82, 2014,2170. Impact factor 3.7 Citations 10
- 137) S.Piek, Z. Wang, J. Ganguly, A. M. Lakey, S. N. Bartley, S. Mowlaboccus, A. Anandan, K. A. Stubb, M. J. Scanlon, A. Vrielink, P. Azadi, R. W. Carlson, C. M. Kahler, "The Role of Oxidoreductases in Determining the Function of the Neisserial Lipid A PhosphoethanolamineTransferase Required for Resistance to Polymyxin", *Plos one*, *9*, 2014, 106513. Impact factor 3.234, Citations 03
- P. Hajra, S. Shyamal, H. Mandal, P. Fageria, S. Pande, C. Bhattacharya, "Photocatalytic activity of Bi₂O₃ nanocrystalline semiconductor developed via chemical-bath synthesis" *Electrochimica Acta*, *123*, 2014, 494–500. Impact Factor: 4.504; Citations: 07
- 139) H. Mandal, S. Shyamal, P. Hajra, B. Samanta, P. Fageria, S. Pande, C. Bhattacharya "Improved photoelectrochemical water oxidation using wurtzite ZnO semiconductors synthesized through simple chemical bath reaction", *Electrochimica Acta*, 141, 2014, 294–301. Impact Factor: 4.504; Citations: 4
- 140) Synthesis of 3,6-di(pyridin-2-yl)-1,2,4,5-tetrazine (pytz) capped silver nanoparticles using 3,6-di(pyridin-2-yl)-1,4-dihydro-1,2,4,5-tetrazineas reducing agent: Application in naked eye sensing of Cu²⁺, Ni²⁺ and Ag⁺ ions in aqueous and paper platform. Suvendu Samanta, Sudipto Das, Papu Biswas. Sensors and Actuators *B*, 202, 2014, 23–30, Impact Factor = 4.097, Citation = 6.
- 141)Iron(III) and manganese(III) complexes of pseudocalixarenetetraiminotetraphenol macrocyclic ligand: Structure, magnetism and electrochemistry. Papu Biswas, Pradip Bag, Amit Kumar Dutta, Ulrich Flörke, Kamalaksha Nag. *Polyhedron*, 75, 2014, 118–126, Impact Factor = 2.11, Citation = 02.
- 142) D. Sengupta, P. Ghosh, T. Chatterjee, H. Datta, Nanda D. Paul, S. Goswami, "Ligand-Centered Redox in Nickel(II) Complexes of 2-(Arylazo)pyridine and Isolation of 2-Pyridyl-Substituted Triaryl Hydrazines via Catalytic N-Arylation of Azo-Function" *Inorg. Chem.*, 53, 2014, 12002-12013. Impact factor: *Impact Factor: 4.762*, Citations: 02

List of Publications for the Year 2013

- 143)S. Goswami, S. Maity, A. K. Das, A. C. Maity, "Single chemosensor for highly selective colorimetric and fluorometric dual sensing of Cu(II) as well as 'NIRF' to acetate ion" *Tetrahedron Lett.*, 54, 2013, 6631-6634. Impact factor: 2.37, Citations: 17
- 144)S. Goswami, S. Paul and A. Manna A differentially selective chemosensor for a ratiometric response to Zn²⁺ and Al³⁺ in aqueous media with applications for molecular switches, *RSC Adv.*, *3*, 2013, 25079-25085. Impact factor: 3.84, Citations: 29
- 145)S. Goswami, S. Paul and A. Manna, A highly reactive (<1 min) ratiometric chemodosimeter for selective "naked eye" and fluorogenic detection of hydrazine *RSC Adv.*, *3*, 2013, 18872-18877. Impact factor: 3.84, Citations: 18
- 146)S. Goswami, S. Das, K. Aich, D. Sarkar, T. Kumar Mondal, Colorimetric as well as dual switching fluorescence 'turn on' chemosensors for exclusive recognition of Zn²⁺ and HSO₄⁻ in aqueous solution: experimental and theoretical studies, *Tetrahedron Lett.*, 54, 2013, 6892-6896. Impact factor: 2.37, Citations: 15
- 147) S. Goswami, S. Das, K. Aich, B. Pakhira, S. Panja, S. K. Mukherjee, and S. Sarkar, A Chemodosimeter for the Ratiometric Detection of Hydrazine Based on Return of ESIPT and Its Application in Live-Cell Imaging, *Org. Lett.*, 15, 2013, 5412-5415. Impact factor: 6.36, Citations: 44
- 148) S. Goswami, K. Aich, S. Das, A. K. Das, D. Sarkar, S. Panja, T. K. Mondal and S. Mukhopadhyay, A red fluorescence 'off-on' molecular switch for selective detection of Al³⁺, Fe³⁺ and Cr³⁺: experimental and theoretical studies along with living cell imaging, *Chem. Commun.*, 49, 2013, 10739-10741. Impact factor: 6.83, Citations: 53
- 149)S. Goswami, A. K. Das, S. Maity 'PET' vs. 'push-pull' induced ICT: a remarkable coumarinyl-appended pyrimidine based naked eye colorimetric and fluorimetric sensor for the detection of Hg²⁺ ions in aqueous media with test trips, *Dalton Trans.*, 42, 2013, 16259-16263. Impact factor: 4.19, Citations: 17
- 150)S. Goswami, A. Manna, S. Paul, C. K. Quah and H-K Fun, Rapid and ratiometric detection of hypochlorite with real application in tap water: molecules to low cost devices (TLC sticks), *Chem. Commun.*, 49, 2013, 11656-11658. Impact factor: 6.83, Citations: 27
- 151)S Goswami, S. Das, K. Aich, D. Sarkar, T. K. Mondal, C. K. Quah and H-K Fun, CHEF induced highly selective and sensitive turn-on fluorogenic and colorimetric sensor for Fe³⁺, *Dalton Trans.*, 42, 2013, 15113-15119. Impact factor: 4.19, Citations: 31
- 152) S Goswami, S Maity, A Das, A C Maity, T K Mandal, S Samanta, Remarkable ESIPT induced NIR emission by a selective colorimetric dibenzimidazolo diimine sensor for acetate, *Tetrahedron Lett.*, 54, 2013, 5232-5235. Impact factor: 2.37, Citations: 17
- 153)S Goswami, S Chakraborty, S Paul, S Halder, A C. Maity. A simple quinoxaline-based highly sensitive colorimetric and ratiometric sensor, selective for nickel and effective in very high dilution. *Tetrahedron Lett.*, 54, 2013, 5075-5077. Impact factor: 2.37, Citations: 16

- 154) S Goswami, A Manna, A K Maity, S Paul, A K Das, M K Das, P Saha, C K Quah and H-K Fun, Selective detection and bio-imaging of Pd²⁺ with novel 'C-CN' bond cleavage of cyano-rhodamine, cyanation with diaminomaleonitrile, *Dalton Trans*, *42*, **2013**, 12844-12848. **Impact factor: 4.19, Citations: 15**
- 155)S Goswami, D Sen, A K Das, N K Das, K Aich, H-K Fun, C K Quah, A K Maity, Pa Saha A new rhodamine-coumarin Cu²⁺-selective colorimetric and 'off-on' fluorescence probe for effective use in chemistry and bioimaging along with its bound X-ray crystal structure, Sens. Actuators B, 185, 2013, 518-525. Impact factor: 4.09, Citations: 18
- 156)H. K. Fun, C. K. Quah, K. Aich, S. Das and S. Goswami, Ethyl 2-[(2-oxo-2H-chromen-7-yl)- oxy]acetate. *Acta crystallographica section E*, E69, 2013, o502. Impact factor: 0.35, Citations: 0
- 157)H. K. Fun, C. K. Quah, K. Aich, S. Das and S. Goswami, 7-Hydroxymethyl-2-pivaloylamino-1,8naphthyridine. *Acta crystallographica section E*, E69, **2013**, o503. **Impact factor: 0.35**, **Citations: 0**
- 158)S. Seth, N. K. Das, K. Aich, H. K. Fun, C. K. Quah and S. Goswami. Exploring contribution of intermolecular interactions in supramolecular layered assembly of naphthyridine co-crystals: Insights from Hirshfeld surface analysis of their crystalline states. J. Mol. Struct., 1048, 2013, 157-165. Impact factor: 1.6, Citations:
- 159)S. Goswami, A. K. Das, K. Aich, A. Manna. Competitive intra- and inter-molecular proton transfer in hydroxynaphthyl benzothiazole: selective ratiometric sensing of acetate, *Tetrahedron Lett.*, 54, 2013, 4215-4220. Impact factor: 2.37, Citations: 23
- 160) S. Goswami, S. Das, K. Aich. An ICT based highly selective and sensitive sulfur-free sensor for naked eye as well as fluorogenic detection of Hg²⁺ in mixed aqueous media. *Tetrahedron Lett.*, *54*, **2013**, 4620-4623.
 Impact factor: 2.37, Citations: 18
- 161) S. Goswami, S. Paul and A. Manna. Selective "naked eye" detection of Al(III) and PPi in aqueous media on a rhodamine–isatin hybrid moiety *RSC Adv.*, *3*, **2013**, 10639-10643. **Impact factor: 3.84, Citations: 50**
- 162) S. Goswami, S. Paul and A. Manna. Carbazole based hemicyanine dye for both "naked eye" and 'NIR' fluorescence detection of CN⁻in aqueous solution: from molecules to low cost devices (TLC plate sticks). *Dalton Trans.*, 42, 2013, 10682-10686. Impact factor: 4.19, Citations: 31
- 163)S. Goswami, A. K. Das, K. Aich, A. Manna, S. Maity, K. Khanra and N. Bhattacharyya. Ratiometric and absolute water-soluble fluorescent tripodal zinc sensor and its application in killing human lung cancer cells. *Analyst*, 138, 2013, 4593-4598. Impact factor: 4.10, Citations: 23
- 164)S. Goswami, S. Paul and A. Manna. Highly reactive (<1 min) ratiometric "naked eye" detection of hypochlorite with real application in tap water, *Dalton Trans.*, 42, 2013, 10097-10101. Impact factor: 4.19, Citations: 29
- 165) S. Goswami, A. Manna, S. Paul, A. K. Das, K. Aich and P. K. Nandi. Resonance-assisted hydrogen bonding induced nucleophilic addition to hamper ESIPT: ratiometric detection of cyanide in aqueous media *Chem. Commun*, 49, 2013, 2912-2914. Impact factor: 6.83, Citations: 63

- 166) S. Goswami, A. Manna, S. Paul, K. Aich, A. K. Das and S. Chakraborty. Highly Reactive (< 1min) Ratiometric Probe for Selective "Naked Eye" Detection of Cyanide in Aqueous Media. *Tetrahedron Lett.*, 54, 2013, 1785-1789. Impact factor: 2.37, Citations: 29
- 167) S. Goswami, A. Manna, S. Paul, K. Aich, A. K. Das and S. Chakraborty. Dual channel selective fluorescence detection of Al(III) and PPi in aqueous media with 'off-on-off' switch which mimics molecular logic gating (INHIBIT and EXOR gate) interpretations. Dalton Trans., 42, 2013, 8078-8085. Impact factor: 4.19, Citations: 50
- 168)S. Goswamia, A. C. Maity, S. Chakraborty, M. K. Das and Bhaswati Goswami, A new route for total synthesis (±) dephosphoForm B of molybdenum cofactor by direct one step thiophene annulation from suitable pterin alkynes. *Tetrahedron Lett.*, 54, 2013, 2373-2376. Impact factor: 2.37, Citations: 01
- 169) S. Goswami, K. Aich, S. Das, A. K. Das, A. Manna and S. Halder. A highly selective and sensitive probe for colorimetric and fluorogenic detection of Cd²⁺ in aqueous media. *Analyst*, 138, 2013, 1903-1907. Impact factor: 4.10, Citations: 29
- 170)S. Goswami, K. Aich, A. K. Das, A. Manna and S. Das. A naphthalimide-quinoline based probe for selective, fluorescence ratiometric sensing of trivalent ions. *RSC Adv.*, *3*, 2013, 2412-2416. Impact factor: 3.84, Citations: 35
- 171)A. Dutta, J. Datta, "Significant role of surface activation on Pd nano catalyst in promoting the electrode kinetics of ethanol oxidation: Temperature effect, product analysis & theoretical computations", *Int. J. Hydrogen Energy*, *38*, 2013, 7789-7800. Impact Factor: 3.31; Citation: 10
- 172) A. Jana, J. Datta, "Enhancement of photo-characteristics of Bi₂Se₃ thin films by post heat treatment at optimal temperature range" *J. Electroanal. Chem.*, 689, 2013, 31-41. Impact Factor: 2.73, Citation: 03
- 173) A. Talapatra, J. Datta, N.R. Bandhyopadhyay, "Structure-properties relationship of TRIP-assited steels by Non-destructive Testing Method", *Chemical and Materials Engineering*, *1*, 2013, 18-27. Citation: 0
- 174) A. Talapatra, N.R. Bandhyopadhya, J. Datta, "Correlation between Heat Treatment, Microstructure and Properties of Trip-Assisted Steels", *Int. J. Mechanical, Aerospace, Industrial, Mechatronic and Manufacturing Engeering*, 7, 2013, 663-668. Citation: 0
- 175)S. K. Maji, A. K. Dutta, G. R. Bhadu, P. Paul, A. Mondal, B. Adhikary, " A novel amperometric biosensor for hydrogen peroxide and glucose based on cuprous sulfide nanoplates " *J. Mater. Chem B*, *1*, 2013, 427-434, Impact Factor-4.72, Citation: 15
- 176) S. K. Maji, A. K. Dutta, D.N. Srivastava, P. Paul, A. Mondal, B. Adhikary, U. Adhikary, " Electrocatalytic activity of silver nanoparticles modified glassy carbon electrode as amperometric sensor for hydrogen peroxide " *J. Nanosci. Nanotechnol*, *13*, 2013, 4969-4974. Impact Factor-1.5.
- A. K. Dutta, S. Das, S. Samanta, P. K. Samanta, B. Adhikary, P. Biswas, "CuS nanoparticles as a mimic peroxidase for colorimetric estimation of human blood glucose level "*Talanta*, *107*, 2013, 361-367, Impact Factor-3.55, Citation: 33

- L N Dawe, B Adhikary, JL Collins, CR Lucas, "Bis {[2, 2'-(5, 8, 11-trithia-2, 14-diazapentadeca-1, 14-diene-1, 15-diyl) diphenolato] palladium (II)} acetonitrile monosolvate" *Acta. Crystallogr. Sect. E.- Struct Rep. Online*, 2013, 69, m360-m361, Impact Factor-0.35. Citations: 0
- 179)B. Chakraborty, B. Show, S. Jana, B. C. Mitra, S. K. Maji, B. Adhikary, N. Mukherjee, A. Mondal, " Cathodic and anodic deposition of FeS₂ thin films and their application in electrochemical reduction and amperometric sensing of H₂O₂" *Electrochim. Acta*, *94*, **2013**,7-15, **Impact Factor-4.5**, **Citation: 8**
- 180) A. K. Dutta, S. K. Maji, P. Biswas, B. Adhikary, "New peroxidase–substrate 3,5–di–tert–butylcatechol for colorimetric determination of blood glucose in presence of prussian blue–modified iron oxide nanoparticles" *Sens. Actuat. B Chem*, 177, 2013, 676-683. Impact Factor-4.10, Citation: 13
- 181)S. Das, S. Samanta, S. K. Maji, P. K Samanta, A. K. Dutta, D. N. Srivastava, B. Adhikary, P. Biswas, " Visible–light–driven synthesis of 2–substituted benzothiazoles using CdS nanosphere as heterogenous recyclable catalyst" *Tetrahedron. Lett*, 54, 2013, 1090-1096. Impact Factor-2.38, Citation: 12.
- 182) S. Jana, S. K. Bhar, N. Mukherjee, A. Mondal, "Electrodeposition of polymer encapsulated cobalt sulfide thin films: search for a frequency switching material", *Materials Letters*, 109, 2013, 51–54. Impact Factor-2.489, Citations:01
- U. Gangopadhyay, S. Jana, S. Das, P. Ghosh, A. Mondal, "Anti-reflective nanocomposite based coating for crystalline silicon solar cells with noticeable significance", *J. Renewable And Sustainable Energy*, *5*, 2013, 031607. Impact Factor-0.904, Citation: 01
- 184) S. K. Bhar, S. Jana, A. Mondal, N. Mukherjee, "Photocatalytic degradation of organic dye on porous iron sulfide film surface", *J. Colloid and Interface Science*, 393, 2013, 286-290, Impact Factor-3.368, Citations: 05
- 185) J. Adhikary, P. Chakraborty, S. Das, T. Chattopadhyay, A. Bauzá, S. K. Chattopadhyay, B. Ghosh, F. A. Mautner, A. Fontera, D. Das, "A combined experimental and theoretical investigation on the role of halide ligands on the Catecholase-like activity of mononuclear Nickel(II) Complexes with a phenol-based Tridentate ligand" *Inorg. Chem.* 52, 2013, 13442-13452. *Impact Factor:* 4.762; Citations: 22
- 186) S. Naskar, S. Naskar, R. J. Butcer, M. Corbella, A. E. Ferao, S. K. Chattopadhyay, "Synthesis, X-ray crystal structure, spectroscopic, electrochemical and theoretical studies on Mn(III) complexes of pyridixal Schiff bases with two diamines" *Eur. J. Inorg. Chem.* 2013, 3249-3260. *Impact Factor: 2.942*; Citations: 05
- 187) S. Mondal, S. Naskar, A. K. Dey, E. Sinn, C. Eribal, S. R. Herron, S. K. Chattopadhyay, "Mononuclear and binuclear Cu(II) complexes of some tridentate aroyl hydrazones. X-ray crystal structures of a mononuclear and a binuclear complex" *Inorg. Chim. Acta*, 398, 2013, 98-105. *Impact Factor: 2.046*; Citations: 11
- 188) K. Hatua, P.K. Nandi, "Beryllium-Cyclobutadiene Multidecker Inverse Sandwiches: Electronic Structure and Second-Hyperpolarizability" J. Phys. Chem. A, 117, 2013, 12581 - 12589. Impact Factor: 2.693; Citations: 13

- 189) K. Hatua, P.K. Nandi, "Third-order NLO Property of Beryllium-Pyridyne Complexes" J. Theor. Comput. Chem., 12, 2013, 1350075 - 1-13. Impact Factor: 0.638; Citations: 4
- 190) K. Hatua, P.K. Nandi, "Interaction of Beryllium with Acceptor Hydrocarbons: Electronic structure and Second Hyperpolarizability" J. Theor. Comput. Chem., 12, 2013, 1350046-1-11. Impact Factor: 0.638; Citations: 7
- 191) U. Saha, T. K. Si, P.K. Nandi, K. K. Mukherjea, "An Amino Acid Coordinated Vanadium (IV) Complex: Synthesis, Structure, DFT Calculations and VHPO Mimicking Catalytic Bromoperoxidation of Organic Substrates" *Inor. Chem. Commun.*, 38, 2013, 43-46. *Impact Factor:* 2.062; Citations: 0
- 192) K. Hatua, P.K. Nandi, "Relationships between different-order polarizabilities and ground state dipole moment" J. Theor. Comput. Chem., 12, 2013, 1250099-1-25. Impact Factor: 0.638; Citations: 9
- 193) S. K. Sau, T. K. Manna, A. Giri, P.K. Nandi, "Effect of Human Urine during Production of Methane from Boiled Rice" Int. J. Sc. Research, 2, 2013, 60–64. Impact Factor: 3.358; Citations: 1
- 194) S. K. Sau, P.K. Nandi, A. Giri, T. K. Manna, "Enhancement of Methane Production from Tea Waste and Pumpkin Waste using Human Urine" *Int. J. Sc. Eng. and Tech. Res.*, 2, 2013, 2107 2110. *Impact Factor:* 3.59; Citations: 1
- 195)S. K. Sau, T. K. Manna, A. Giri, P. K. Nandi, "High Rate Methane Production from Mustard Oil Cake, Groundnut Cake and Rice Water using Human Urine" *Int. J. Chem. Eng. Research*, *5*, 2013, 139 146.
 Impact factor: ; Citations: 0
- 196) P. Roy, P. Mitra, B. K. Ghorai, "Synthesis of azahomosteroid ring system through intramolecular [4+2] cycloaddition of *in situ* generated azaisobenzofuran intermediates", *Tetrahedron Lett.* 54, 2013, 1440–1443.
 Impact factor: 2.379, Citations: 4
- 197) D. Jana, S. Boxi, B. K. Ghorai, "Synthesis of *gem*-tetraphenylethylene oligomers utilizing Suzuki reaction and their aggregation properties", *Dyes and Pigments*, 99, 2013, 740–747. Impact factor: 3.966, Citations: 6
- 198) A. K. Mahapatra, S. K. Manna, D. Mandal, and C. D. Mukhopadhyay, Highly Sensitive and Selective Rhodamine-Based "Off–On"Reversible Chemosensor for Tin (Sn⁴⁺) and Imaging in Living Cells, *Inorg. Chem.*, 52, 2013, 10825–10834. Impact factor: 4.762, Citations: 25
- 199) A. K. Mahapatra, K. Maiti, P. Sahoo, P. K. Nandi, "A new colorimetric and fluorescent bis(coumarin)methylene probe for fluoride ion detection based on the proton transfer signaling mode, *Journal of Luminescence*, 143, 2013, 349-354. Impact factor: 2.714, Citations: 22
- 200) A. K. Mahapatra, S. K. Manna, S. K. Mukhopadhyay and A. Banik, First Rhodhamine-Based "Off-On" Chemosensor with High Selectivity and Sensitivity for Zr⁴⁺ and Its Imaging in Living Cell, *Sensors and Actuators B: Chemical*, 183, 2013, 350-355. Impact factor: 4.097, Citations: 10

- 201)A. K. Mahapatra, J. Roy, P. Sahoo, S. Kanti Mukhopadhyay, A. Banik, D. Mandal, Carbazole phenylthiosemicarbazone-based ensemble of Hg²⁺ as selective fluorescence turn-on sensor toward cysteine in water, *Tetrahedron Lett.*, *54*, **2013**, 2946-2951. **Impact factor: 2.37**, **Citations: 9**
- 202) A. K. Mahapatra, G. Hazra, S. K. Mukhopadhyay, A. R. Mukhopadhyay, A new selective turn-on fluorogenic dipodal-cobalt(II) ensembleprobe for nitrite ion detection and live cell imaging, *Tetrahedron Lett.*, 54, 2013, 1164-1168. Impact factor: 2.37, Citations: 14
- 203) K. Adhikari, S. Chattopadhyay, B. K. De, A. Sharma, R. K. Nath, and D. Sinha, "Search of truncation of (N-1) electron basis containing full connected triple excitations computing main and satellite ionization potentials via Fock space coupled cluster approach", *J. Comp. Chem.*, *34*, 2013,1291, Impact factor = 3.589. Google Scholar Citation: 3
- 204) R. K.Chaudhuri, S.Chattopadhyay, K. F.Freed, U. S. Mahapatra, "Theoretical studies of the ground and excited state structures of stilbene", J. Phys. Chem. A, 117, 2013, 9424, Impact factor = 2.693. [Invited ArticleinSpecial Issue: "Oka Festschrift: Celebrating 45 Years of Astrochemistry"] Google Scholar Citation: 2
- 205) R. K.Chaudhuri, S.Chattopadhyay, and U. S.Mahapatra, "Taming the electronic structure of lead and ekalead (Flerovium) by the relativistic coupled-cluster method", *117*, 2013, 8555, Impact factor = 2.693.[Invited Article in Special Issue: "Structure and Dynamics: ESDMC-2013"] Google Scholar Citation: 2
- 206) R. K.Chaudhuri, S.Chattopadhyay, and U. S. Mahapatra, "Reappraisal of nuclear quadrupole moments of atomic halogens via relativistic coupled cluster linear response theory for the ionized process", *J. Phys. Chem. A*, 117, (2013), 12616, Impact factor = 2.693. Google Scholar Citation: 1
- 207) A. Shit, **S. Chattopadhyay**, and J. Ray Chaudhuri, "Kapitza-Landau time window for a periodically driven system with friction: A system-bath Hamiltonian approach", *Eur. J. Phys. B*, 86, (2013), 23, Impact factor = 0.629. Google Scholar Citation: 5
- 208) A. Shit, S.Chattopadhyay, and J. Ray Chaudhuri, "Quantum stochastic dynamics in presence of a timeperiodic rapidly oscillating potential: Nonadiabatic escape rate", J. Phys. Chem. A,117,(2013) ,8576, Impact factor = 2.693. [Invited Article in Special Issue: "Structure and Dynamics: ESDMC-2013"]. Google Scholar Citation:3
- 209) J. Ganguly, L. Y. Low, N. Kamal, E.Saile, L. Scott Forsberg, G. Gutierrez-Sanchez, Alex R. Hoffmaster, R.Liddington, Conrad P. Quinn, Russell W. Carlson, and Elmar L. Kannenberg, "The secondary cell wall polysaccharide of *Bacillus anthracis* provides the specific binding ligand for the C-terminal cell wall-binding domain of two phage endolysins, PLYLand PLYG", *Glycobiology*, 23, 2013, 820. Impact Factor 3.15 Citations 10
- 210) C. Wanty, A.Anandan, S.Piek, J. Walshe, J. Ganguly, R. W. Carlson, K. A. Stubbs, C. M. Kahler, A.Vrielink"The Structure of the NeisserialLipooligosaccharidePhosphoethanolamineTransferase A (lpta)

Required for Resistance to Polymyxin.".Journal of Molecular Biology, ,425, 18, 2013, 3389–3402. Impact Factor 4.33 Citations 10

- 211) M. Bhatnagar, L. Parwani, V. Sharma, J. Ganguly and A. Bhatnagar, "Hemostatic, antibacterial biopolymers from Acacia arabica (Lam.)Willd and Moringaoleifera (Lam.) As potential wound dressing materials."*Indian Journal of Experimental Biology*, *51*, 2013, Impact factor 0.8 Citations 0
- 212) P. Maji, A. Sinha, S. Basuand J. Ganguly, "Electrochemical Study of Aqueous Extract of Star-fruit", *International Journal of Applied Sciences & Engineering*, 2013, 1, 71-77. Impact factor 0; Citations 0
- 213) M. M. Hobbs, James E. Anderson, Jacqueline T. Balthazar, Justin L. Kandler, Russell W. Carlson, J. Ganguly, A. A. Begum, Joseph A. Duncan, Jessica T. Lin, P. Frederick Sparling, Ann E. Jerse, William M. Shafer, "Lipid A's Structure Mediates *Neisseria gonorrhoeae*Fitness during Experimental Infection of Mice and Men," *mbio*, 4, 2013, e00892-13. Impact factor 6.78 Citations 17
- 214)Photocatalysis by 3,6-Disubstituted-s-Tetrazine: Visible-Light Driven Metal-Free Green Synthesis of 2-Substituted Benzimidazole and Benzothiazole. SuvenduSamanta, Sudipto Das, and Papu Biswas. J. Org. Chem. 78, 2013, 11184–11193, Impact Factor = 4.721, Citation = 22.
- 215) A mononuclear copper(II) complex immobilized in mesoporous silica: an efficient heterogeneous catalyst for the aerobic oxidation of benzylic alcohols. SuvenduSamanta, Sudipto Das, Partha Kumar Samanta, Supriya Dutta and Papu Biswas. *RSC Advances*, *3*, 2013, 19455–19466, Impact Factor = 3.84, Citation = 12.
- 216) Macrocyclic lanthanide(III) complexes of iminophenol Schiff bases and carboxylate anions: Syntheses, structures and luminescence properties. Pradip Bag, Swarup Kumar Maji, Papu Biswas, Ulrich Flörke, Kamalaksha Nag. Polyhedron, 52, 2013, 976–985 (Special Issue dedicated to Sir Alfred Warner), Impact Factor = 2.011, Citation = 8.
- 217) C. Bhattacharya, H. C. Lee, and A. J. Bard, "Rapid screening by scanning electrochemical microscopy (SECM) of dopants for Bi₂WO₆ improved photocatalytic water oxidation with Zn doping" *Journal of Physical Chemistry C*, *117*, 2013, 9633–9640. Impact Factor: 4.77; Citations: 37.

Book Chapter:

- J. Datta, (2015) "Multi-metallic nano catalysts for anodic reaction in direct alcohol Fuel Cell", in "Nanomaterials for Direct Alcohol Fuel Cells", Edited by Yixnan Wang, CRC Press, Pan Stanford Publishing Pte Ltd., Singapore, ISBN 9789814669009-CAT# N11367
- N. D. Paul, P. Gualco, B. de Bruin, "Ligand Design In Metal Chemistry: Reactivity and Catalysis" Wiley, (edited by M. Stradiotto, & R. Lundgren), 2015, ISBN: 978-1-118-83983-6.

CIVIL ENGINEERING

Journal Publications

<u>2015</u>

- 1. Mangalgiri, K., Adak, A. and Blaney, L. "Organoarsenicals in poultry litter: Detection, fate, and toxicity", Environment International, Vol. 75, 2015, pp. 68-80, Impact Factor: 5.56, Citation: 6 (SCI).
- 2. BhattacharjyaSoumya, ChakrabortiSubhasis and Das Subhasish, "Robust Design Optimization of RC Folded Plate and Shell Structure under Uncertainty", Strucural Engineering and Mechanics, Vol. 56, No. 5, 2015, pp 707-726, Impact factor: 0.927, Citation: Nil; (SCI)
- 3. Rupa Chandra, SahaUjjwal and Mujumdar P.P., "Model and Parameter uncertainty in IDF relationship under climate change", Advances in Water Resources, Vol. 79, 2015, pp 127-139, Impact factor 3.417, Citations:Nil(SCI)
- 4. BeraAshis Kumar and Chakraborty Sourav, "Compaction and unconfined strength of sand modified by class F fly ash", Geomechanics and Engineering, Vol.9, No.2, 2015, pp.261-273, Impact Factor : 0.504, Citations:Nil, (SCI)
- Roy, A. K. and Ghosh, A. (Dey), "A Study on the Design Parameters of the Compliant LCD for Structural Vibration Control under Near Fault Earthquakes.", Journal of Structural Engineering, 2015, SERC (accepted), Impact Factor: 1.504, Citation:Nil (SCI)
- 6. Das Sumanta, Gur Sourav, Mishra Sudib K. and Chakraborty Subrata, "Optimal performance of Base Isolated building considering limitation on excessive isolator displacement", Structure and Infrastructure Engineering, Vol. 11, No. 7, 2015, pp 904-917, Impact Factor: 1.454, Citation: Nil (SCI)
- Roy Bijan Kumar and Chakraborty Subrata, "Robust Optimum Design of Base Isolation System in Seismic Vibration Control of Structures under Random System Parameters", Structural Safety, Vol. 55, 2015, pp 49– 59, Impact Factor: 1.608, Citations: Nil (SCI)
- Debbarma Rama and Chakraborty Subrata, "Robust optimum design of liquid column vibration absorber in seismic vibration control of structures characterized by random parameters", Struct. Engg Mechanics, Vol. 53, No. 6, 2015, pp 1127-1141, Impact Factor: 0.827, Citations: Nil (SCI)
- 9. Chakraborty Ritwik, Ghosh Ambarish, Ghosh Sudipta and Mukherjee Somnath, "Evaluation of contaminant transport parameters for hexavalent chromium migration through soil media", Environmental Earth Sciences, Vol. 74, No. 7, 2015, pp. 5687- 5697. Impact Factor : 1.765, Citations: Nil (SCI)
- Adak, A., Mangalgiri, K. and Blaney, L. "UV irradiation and UV-H₂O₂ advanced oxidation of the roxarsone and nitarsone organoarsenicals." Water Research, Vol. 70, 2015, pp. 74-85, Impact Factor: 5.53, Citation: 4. (SCI)
- Thakur SandipanNath and Ray Chaitali, "An accurate C0 finite element model of moderately thick and deep laminated doubly curved shell considering cross sectional warping". Thin walled Structures (Elsevier), Vol. 94, 2015, pp. 384-393, Impact factor: 1.749, Citation: 2. (SCI)
- 12. Biswas Dhiraj and Ray Chaitali "Comparative perspective of various shear deformation theories with experimental verification for modal analysis of hybrid laminates". Journal of vibration and control, 2015, Impact factor: 4.36, Citation:Nil, (SCI)
- 13. Thakur SandipanNath and Ray Chaitali, "The effect of thickness coordinate to radius ratio on free vibration of moderately thick and deep doubly curved cross-ply laminated shell". Archive of Applied Mechanics (Springer) (in press), 2015. Impact factor: 1.11, Citation: Nil. (SCI)
- 14. Saha, P., Sarkar, A. K. and Pal, M., "Evaluation of speed-flow characteristics on two-lane highways with mixed traffic", Transport, Taylor & Francis, 2015, DOI: 10.3846/16484142.2015.1004369. Impact factor: 0.553, Citation: Nil(SCIE).
- 15. Sarkar, Sushovan and MazumderDebabrata, "Development of a simplified model for the fixed biofilm reactor", Water Science and Technology, Vol. 72, No. 9, 2015, pp. 1601 1610. Impact Factor: 1.1, Citations :(SCIE).

- Goswami, Supriyo and MazumderDebabrata, "Kinetic Behaviour of the Activated Sludge Process used for Treating Composite Chrome Tannery Wastewater", Polish Journal of Environmental Studies, Vol. 24, No. 6, 2015, pp. 2405-2409. Impact Factor: 0.881, Citations :(SCIE).
- 17. Ghosh Saibal, BhattacharjyaSoumya, and Chakraborty Subrata, "Behaviours of short fiber reinforced composite under shear", Proceedings of ICE: Construction Materials, Vol. 168, No. 6, 2015, pp 267–275, Impact Factor:NA, Citations:Nil; (Scopus)
- 18. DlaminiN.S., RowshonM.K., SahaUjjwal, FikriA., Lai SH and Mohd.MSF, "Developing and calibrating a stochastic rainfall generator model for simulating daily rainfall by markov chain approach", JurnalTeknologi, Vol. 76, No. 15, 2015, pp 13-19, Impact factor 0.146, (Scopus)
- Ghosh Saibal, BhattacharjyaS and Chakraborty S, "Behaviours of short fiber reinforced composite under shear", Proceedings of ICE: Construction Materials, Vol. 168, No.6, 2015, pp 267-275, Impact Factor: Nil, Citations: Nil (Scopus)
- 20. Chowdhury Indrajit, Ghosh Ambarish, and DasguptaSambhuPada, "Stiffness Degradation and Damping Augmentation of Soil Under Earthquake Loading", Electronic Journal of Geotechnical Engineering, Vol. 20, No. 9, 2015, pp. 3851-3874, Impact Factor: Nil, Citations: Nil (Scopus)
- 21. Chowdhury Indrajit, Ghosh Ambarish, and DasguptaSambhuPada, "Dynamic Soil Structure Interaction of Structures Resting on Soil", Indian Geotechnical Journal, 2015, Impact Factor: Nil, Citations: Nil, (Scopus).
- 22. Metya, S. and Bhattacharya, G., "Probabilistic Stability Analysis of the Bois Brule Levee Considering the Effect of Spatial Variability of Soil Properties Based on a New Discretization Model", Indian Geotechnical Journal, 2015, Impact Factor: Nil, Citations: NIL, (Scopus).
- Jana, D., Bhaduri, T. and Dalui, S. K., "Numerical Study of Optimization of Interference Effect on Pentagonal Plan Shaped Tall Building", Asian Journal of Civil Engineering (BHRC), Vol. 16, No. 8, 2015, pp- 1109-1139, Impact Factor: Nil, Citation: Nil, (Scopus)
- 24. Ray Chaitali and Mandal Bibekananda, "Linear and Non-linear Analysis of Fibre Reinforced Plastic Bridge Deck due to Vehicle Loads". Journal of The Institution of Engineers (India), Series A, Vol. 96, No. 2, 2015, pp 109-121, Impact factor: 0.101, Citation: Nil. (Scopus)
- 25. Murmu, S, and Biswas, S, "Application of Fuzzy logic and Neural Network in Crop Classification: A review" Aquatic Procedia, Elsevier, Vol. 4 (2015), pp 1203- 1210. (Scopus)
- Saha, P., Sarkar, A. K. & Pal, M., "Evaluation of Performance Measures of Two-Lane highways under Heterogeneous Traffic", Pertanika Journal of Science & Technology, vol. 23, no. 2, 2015, pp. 223 - 239. Impact factor: 0.011, Citation: Nil (Scopus).
- MazumderDebabrata, "Cost-effective and Sustainable Sewerage Network for Sanitation of an Underdeveloped and Congested Town", Indian Journal of Environmental Protection, Vol. 35, No. 7, 2015, pp. 610 – 614. Impact Factor : Not reported, Citations : Scopus
- Roy Suprateek, Mishra Sudib K. and Chakraborty Subrata, "Performance of Alternative Wavelet Basis for Feature Based Damage Detection in Structures", IntJ. of Life Cycle Reliability & Safety Engg., Vol. 1, No. 4, 2015, pp 29-37, Impact Factor: Nil, Citations: Nil
- 29. Ray Chaitali, Biswas Dhiraj and Sit Moumita, "Transient response analysis of hybrid laminated composite plates using third order shear deformation theory," Jordan Journal of Civil Engineering, Vol. 11, No. 3, (in press), 2015. Impact factor: 0.103, Citation: Nil.
- 30. Ray Chaitali and Mandal Bibekananda "Vehicle-induced linear and non-linear static analysis of FRP Bridge deck". Journal of The Institution of Engineers (India): Series A 96 (2), 109-121, 2015.
- BiswasDhirajand Ray Chaitali"Experimental and numerical modeling of hybrid laminates to study the free vibration response. Journal of vibration and control (online publication DOI:10.1177\1077546315592766), 2015.
- 32. Metya, S. and Bhattacharya, G., "Reliability Analysis of Earth Slopes Considering Spatial Variability", Geotechnical and Geological Engineering An International Journal, Springer, DOI: 10.1007/s10706-015-9932-2, 2015.
- 33. Kheyari, P. and Dalui, S. K., "Estimation of Wind Load on Tall Building under Interference Effects", Jordan Journal of Civil Engineering, Vol. 9, No.1, January, 2015, pp- 84-108.
- 34. Sarkar, Sushovan and MazumderDebabrata, "Process design and Application of Aerobic Hybrid Bioreactor in the Treatment of Municipal Wastewater", International Journal of Chemical, Nuclear, Materials and Metallurgical Engineering, Vol. 9, No. 3, 2015, pp. 466 470. Impact Factor : Not reported, Citations :.

- 35. Sarkar, Sushovan and MazumderDebabrata, "Solid Waste Management in Steel Industry Challenges and Opportunities", International Journal of Chemical, Nuclear, Materials and Metallurgical Engineering, Vol. 9, No. 3, 2015, pp. 884 887. Impact Factor : Not reported, Citations :.
- 36. Sarkar, Sushovan and MazumderDebabrata, "Development of a simplified biofilm model", Applied Water Science, DOI 10.1007/s13201-015-0353-4, 2015. Impact Factor : Not reported, Citations :.
- 37. Sarkar, Sushovan and Mazumder, Debabrata, "A Novel Approach to Modeling of an Aerobic Hybrid Bioreactor Treating Easily Biodegradable Substances", The Global Journal of Environmental Science and Research, Vol. 2, No. 1, 2015, pp. 24 - 29. Impact Factor : Not reported, Citations : Not reported
- 38. Goswami, Supriyo and MazumderDebabrata, "Kinetics of Treatment of Composite Chrome Tannery Wastewater using Activated Sludge", The Global Journal of Environmental Science and Research, Vol. 2, No. 1, 2015, pp. 75 79. Impact Factor : Not reported, Citations : Not reported

<u>2014</u>

- 39. BeraAshisKumar."Parametric study on uplift capacity of anchor with tie in sand", KSCE Journal of Civi Engineering. Vol. 18, 2014 No. 4, pp.1028-1035. (Impact Factor : 0.484) (SCI)
- Mondal, D. P., Ghosh (Dey), A. and Chakrabarty, S., "Performance of N-Z system in mitigation of underground blast induced vibration of structures." *Journal of Vibration and Control*, Vol. 20 (13), pp. 2019-2031, 2014 SCImago Journal Rank Score: 0.625, Citations:3. (SCI)
- Mondal, D. P., Ghosh (Dey), A. and Chakrabarty, S., "Control of underground blast induced vibration o structures using fluid viscous damper." *Journal of Vibration Engineering and Technologies*, Vol. 2 (1), pp. 27-33 2014, (SCI).
- 42. Chatterjee Tanmoy and Chakraborty Subrata, Vibration Mitigation of Structures Subjected to Random Wave Forces by Liquid Column Dampers, *Ocean Engineering* 87, 2014,151–161., Impact Factor :1.352, (SCI)
- Mishra Sudib K, Gur S and Chakraborty Subrata, Stochastic Optimization of Shape-Memory-Alloy-Rubber Bearing (SMARB) for Isolating Buildings against Random Earthquake, *Structural Control & Health Monitoring* 2014, 21(9), 1222-1239, DOI: 10.1002/stc.1635, Impact Factor :2.133 (SCI)
- Roy Bijan K, Chakraborty Subrata and Misra Sudib Kumar, Robust optimum design of base isolation system in seismic vibration control of structures under uncertain bounded system parameters, *J. of Vibration and Control*. 20(5), 2014,786 – 800., Impact Factor :4.355, Citations:3(SCI)
- Chakraborty Subrata, Sen Arunabh, <u>Adaptive response surface based efficient Finite Element Model Updating</u> <u>Finite Elements in Analysis and Design</u>, <u>80</u>, 2014, 33–40, Impact Factor :2.017, Citations: 10(SCI)
- 46. Gur Sourav, Mishra S K and Chakraborty S, Performance assessment of buildings isolated by shape memoryalloy rubber bearing: Comparison with elastomeric bearing under near-fault earthquakes, *Structura Control & Health Monitoring*, 21(4), 2014, 449-465 DOI: 10.1002/stc.1576, Impac Factor:2.133,Citations:11(SCI)
- Pal, Sujit and Ghosh, Ambarish, "Volume Change Behavior of Fly Ash–Montmorillonite Clay Mixtures" ASCE, International Journal of Geomechanics, Vol. 14 (1), 2014, pp 59-68., Impact Factor : 1.199, Citations: 4 (SCI)
- Roy, R., Ghosh, D., and Bhattacharya, G., "Influence of Strong Motion Characteristics on Permanen Displacement of Slopes", Journal of International Consortium on Landslides, Springer, DOI: 10.1007/s10346 015-0568-3, 2014, Impact Factor: 2.870, Citations: 01, (SCI).
- Chakraborty, S., Dalui, S. K., and Ahuja, A.K., "Wind Load on Irregular Plan Shape Tall Building A Cas Study", Wind and Structures, An International Journal, Korea (Techno Press), Vol. 19, No.1, 2014, pp. 59-73 Impact Factor: 0.584, Citation: . (SCI)
- Mukherjee, S., Chakraborty, S., Dalui, S. K., and Ahuja, A.K., "Wind Induced Pressure on 'Y' Plan Shape Tal Building", Wind and Structures, An International Journal, Korea (Techno Press) Vol. 19, No.5, 2014, pp-523 540, Impact Factor: 0.584, Citation: Nil. (SCI)
- Ghosh, D. and Gupta, A. Economic justification and eco-friendly approach for regeneration of spent activated alumina for arsenic contaminated groundwater treatment. *Resources, Conservation and Recycling,* Vol.61, Yea 2012, pp.118-124. Impact factor :2.564 (2014) and 3.280 (5 year) Citations: Nil (SCI)

- Sarkar, S., Greenleaf, J.E., Gupta, A., Uy, D., Sengupta, A.K. Sustainable Engineered Processes to Mitigate the Global Arsenic Crisis in Drinking Water: Challenges and Progress, *Annu. Rev. Chem. Biomol. Eng. Vol.* 3, Yea 2012, pp. 497–517, Impact factor : 8.676 (2014) Citations : (SCI)
- Ghosh, D., Sarkar, S., Sengupta, A. K., and Gupta, A. Investigation on the long-term storage and fate of arsenic obtained as a treatment residual: A case study. *Journal of Hazardous Materials, Vol.* 271, Year 2014, pp 302 – 310. Impact Factor: 4.529 (2014) and 5.277 (5 year) Citations : Nil (SCI)
- Ray Chaitali and MajumderSomnath, "Failure analysis of composite plates under static and dynamic loading" Structural Engineering and Mechanics - an International Journal, vol 52, no. 1, pp. 137-147. 2014. Impact factor 0.927, Citation:Nil, (SCI).
- 55. Koner, S., Pal, A. and Adak, A., "Application of silica gel factory waste for methyl orange dye removal", Int. J Environ. Waste Mgmt., Vol. 13, No. 1, 2014, pp. 37-49, Impact Factor: Nil, Citation:Nil,(Scopus)
- 56. BeraAshis Kumar, "Compaction characteristics of fine grained soil and rice husk ash mixture", Internationa Journal of Geotechnical Engineering. Vol.8, 2014, Issue 2, Pp.121-129. (Scopus)
- 57. Mondal, D. P., Ghosh (Dey), A. and Chakrabarty, S., "Fluid viscous damper in mitigation of structural vibration effect due to underground blast." *Int. J. Materials and Structural Integrity*, Vol. 8 (4), pp. 273-290 2014.(Scopus).
- Metya, S. and Bhattacharya, G., "Probabilistic Critical Slip Surface for Earth Slopes Based on the First Orde Reliability Method", Indian Geotechnical Journal, Volume 44, Issue 3, pp. 329-340, 2014, Impact Factor: NIL Citations: 02, (Scopus)..
- Bairagi, A. K. and Dalui, S. K., "Optimization of interference effects on high-rise building for different wind angle using CFD simulation", Electronic Journal of Structural Engineering, Vol. 14, 2014, pp- 39-49, Impac Factor:Nil, Citation:Nil. (SCOPUS)
- Sarkar, S. and Biswas, S. "Selection of Suitable Sites for Water Harvesting Structures in a Catchment using Remote sensing and GIS", *International Journal of Earth Sciences and Engineering*, Vol.7, No.1, 2014, pp 175 180. (Scopus).
- 61. Sit Moumita, Ray Chaitali and Biswas Dhiraj, "Thermal stress analysis of laminated composite plates using third order shear deformation theory", Advances in Structural Engineering, 2014, 149-156.(Scopus)
- 62. Biswas Dhiraj and Ray Chaitali, "Experimental and numerical modal analysis of laminated composite plates with GFRP", Advances in Structural Engineering, 55-66, 2014.(Scopus)
- 63. Mandal Bibekananda andRayChaitali, "Bending of FRP bridge deck under the combined effect of thermal and vehicle load", Advances in Structural Engineering, 2493-2503, 2014.(Scopus)
- Bakshi, S., Bhar, K. K., "Numerical Simulation of Transient Flows in Rivers by Finite Volume Method", Int. Jr Inn. Res. Sc. Eng. Tech., Vol.3 No. 2, 2014
- 65. Gur Sourav, BhowmickSutanu, Mishra Sudib Kumar, Chakraborty Subrata, Compliant Liquid Column Damper Modified by Shape Memory Alloy Device for Seismic Vibration Control, *Journal of Smart Materials and Structures*, 23,2014.
- 66. Das Sumanta, Gur Sourav, MishraSudib K. and Chakraborty Subrata, Optimal performance of Base Isolated building considering limitation on excessive isolator displacement, Structure and Infrastructure Engineering, 2014.
- 67. Chakraborty, S., Dalui, S. K., and Ahuja, A.K., "Experimental Investigation of Surface Pressure on '+' Plan Shape Tall Building", *Jordan Journal of Civil Engineering*, Vol. 8, No.3, 2014.
- 68. Dalui, S. K., "Experimental Investigation of Wind Pressures on Composite Plan Shape Tall Building", Int. J. of Construction Materials and Structures, Volume-2, No.1, 2014.
- 69. Sarkar, Sushovan and MazumderDebabrata, "Feasibility of Hybrid Bioreactor in the treatment of wastewater containing slowly bio-degradable substances", International Journal of Environmental Sciences, Vol. 5, No. 2, 2014, pp. 383 400. Impact Factor : Not reported, Citations : .
- 70. Goswami, Supriyo and MazumderDebabrata, "Scope of biological treatment for composite tannery wastewater", International Journal of Environmental Sciences, Vol. 5, No. 3, 2014, pp. 607 622. Impact Factor : Not reported, Citations :.

<u>2013</u>

- Koner, S., Pal, A. and Adak, A., "Adsorption of 2,4-D Herbicide from Water Environment on Modified Silica Gel Waste." Water Environment Research, Vol. 85, No. 11, 2013, pp. 2147-2156, Impact Factor: 0.87, Citation: 1. (SCI)
- Konar, T. and Ghosh (Dey), A., "Bimodal vibration control of seismically excited structures by the liquid column vibration absorber." Journal of Vibration and Control, Vol. 19(3), 2013, pp. 385-394, Impact factor: SCImago Journal Rank Score: 0.625, Citations: 6.(SCI)
- 73. Mishra Sudib Kumar, Roy Bijan K and CharabortySubrata, "Reliability based optimization of base isolated building under stochastic earthquake load considering random system parameters". Int J of Mechanical Science, Elsevier Sc. 75, 2013, 123-133. Impact Factor: 1.383, Citations: 94. (SCI)
- 74. Mishra Sudib K, Gur S and Chakraborty Subrata, "An improved tuned mass damper (SMA-TMD) assisted by a shape memory alloy spring, Smart Materials and Structures", 22(9)2013, 095016 (16pp), doi:10.1088/0964-1726/22/9/095016, . Impact Factor: 2.502, Citations:4.(SCI)
- 75. Mishra Sudib K., ChakrabortySubrata, "Stochastic optimization of Isolator for base isolated building under parametric uncertainty subjected to random earthquakes ", Int. J. of Acoustic and Vibration. 18 (1), 7-19, 2013, Impact Factor: 0.389, Citations:4.(SCI)
- 76. Roy Bijan K and Chakraborty Subrata, Optimal design of Base Isolation System considering uncertain bounded system parameters, Struct. Engg Mechanics, 46(1) (2013) 19-37. Impact Factor: 0.827, Citations:4.(SCI)
- Chakraborty, Ritwik and Ghosh, Ambarish, "Three- Dimensional Analysis of Contaminant Migration through saturated Homogeneous Soil Media using FDM", ASCE, International Journal of Geomechanics, Vol. 13 (6), 2013, pp 699-712, Impact Factor : 1.199, Citations: 2, (SCI)
- Palchaudhuri, M. and Biswas, S., "Analysis of Meteorological Drought using SPI- a case study of Puruliya district, West Bengal, India", International Journal of Environmental, Chemical, Ecological, Geological and Geophysical Engineering, Vol 7, No 3, 2013, pp 167-174, Citations: 6 (SCI).
- BeraAshis Kumar. "Effect of Jute Geotextile on Consolidation Parameters for Fine Grained Soils and their Mathematical Model", Electronic Journal of Geotechnical Engineering, (ISSN: 1089-3032), USA, Vol. 17, 2013, Bundle L, pp. 2489-2500. (Scopus)
- Saha, P., Bhadra, A., Reddy, N. S. & Sarkar, A. K., "Method of identifying low performance vehicles in heterogeneous traffic on two-lane highways", Procedia - Social and Behavioral Sciences, Elsevier, vol. 104, 2013, pp. 526-532.Impact factor: 0.420, citation: Nil(Scopus).
- Sam Palash Chandra and Chakraborty Subrata, Possibilistic safety assessment of hybrid uncertain systems, Int. J. of Reliability, Quality and Safety Engineering. 20(1), 2013, 1350002-1-19, Citations: 3. (Scopus).
- Koner, S. and Adak, A., "Fixed Bed Column Study for Adsolubilization of 2, 4-D Herbicide on Surfactant Modified Silica Gel Waste." Journal of The Institution of Engineers (India): Series A, Vol. 93, No. 3, 2012, pp. 187-191, Impact Factor: Nil, Citation: Nil.
- 83. BeraAshis Kumar, "Study on unconfined compressive strength of pond ash soil mixture reinforced with jute geotextiles", Emirates Journal for Engineering Research, 18 (1), 2013, pp.59-65.
- 84. BeraAshis Kumar and BanerjeeUday, Uplift capacity of model belled anchor embedded in sand, International Journal of Geotechnical Engineering. Vol.7, Issue 1, Pp.84-90, 2013, Citations: 2
- 85. ChakrabortySubrata and Sam Palash C, Safety Assessment of Hybrid Uncertain System: An Overview, IntJ. of Life Cycle Reliability and Safety Engineering, 2(1), 2013,23-34,
- 86. Bagui,S.K. and Ghosh,A, "Support Loan Concept." Jordan Journal of Civil Engineering, Vol. (1),2013, pp. 17-25. Impact Factor : 0.103
- 87. Bagui, S.K. and Ghosh, A, " Optimization of Antiglare Screen Barrier Cost", Jordan Journal of Civil Engineering, Vol. 7(2), 2013, Impact Factor : 0.103
- 88. Saha, P., Sarkar, A. K. & Pal, M., "Field evaluation of percent time spent following on two-lane highways under mixed traffic situation", International Journal of Civil Engineering and Building Materials, vol. 3, no. 4, 2013, pp.192-198, Citation: Nil

- 89. Chakraborty, S., Dalui, S. K., and Ahuja, A.K., "Experimental and Numerical Study of Surface Pressure on '+' Plan Shape Tall Building", *International Journal of Construction Materials and Structures, Volume-1, No.-1, April, 2013.*
- 90. Roy, T.K. (2013) "Evaluation of the Properties of Alluvial Soil with Addition of Wastes from Thermal Power Plant and Rice Mill". International Journal of Geotechnical Engineering Vol 7, No 3, pp. 323-329
- 91. Roy, T.K. and Ghosal, R.(2013) "A Study on Evaluation of Stress Behavior of Rigid Pavement by Concept Shell System" Journal of Indian Highway, Vol.41, No.7, pp 21-24
- MazumderDebabrata, "Scope of BOD, Nitrogen and Phosphorous Removal through Plant-Soil Interaction in the Wetland", International Journal of Environmental Science and Engineering, Vol. 7, No, 2, 2013, pp. 833 – 842. Impact Factor : Not reported, Citations :.
- 93. Goswami, Supriyo and MazumderDebabrata, "Treatment of Chrome Tannery Wastewater by Biological Process A Mini Review", International Journal of Chemical, Nuclear, Materials and Metallurgical Engineering, Vol. 7, No. 11, 2013, pp. 522 528. Impact Factor : Not reported, Citations :.

<u>2012</u>

- 94. Chakraborty Subrata, BhattacharjyaSoumya, and HalderAchintya, "Sensitivity Importance-based Robust Optimization of Structures with Incomplete Probabilistic Information," International Journal for Numerical Methods in Engineering, Vol.90, No.10, 2012, pp 1207 1320, Impact factor: 2.055, Citations: 6 (SCI)
- 95. Chakraborty Subrata, Debbarma Rama, Marano Giuseppe Carlo, Optimal Performance of Tuned Liquid Column Dampers Considering Maximum liquid Motion in Seismic Vibration Control of structures, Journal of Sound and Vibration 331,2012, 1519–1531, Impact Factor :1.813, 1.376, Citations: 16(SCI)
- Bagui,S.K. and Ghosh,A, "Traffic and Revenue Forecast at Risk for a BOT Road Project". Korean Society of Civil Engineering, Springer, Vol. 16(6), 2012, pp. 905-912, Impact Factor: 0.484, Citations: 1 (SCI)
- 97. Bagui,S.K. and Ghosh,A, "Uses of Anti Glare Screen Barrier in Economic, Financial Analysis and Determination of Optimal Debt Capacity Ratio for a Road Project", Korean Society of Civil Engineering, Springer, Vol. 16(7), 2012, pp. 1104-1114. Impact Factor: 0.511, Citations: Nil. (SCI)
- Bagui,S.K. and Ghosh,A, "Uses of Anti Glare Screen Barrier in Economic, Financial Analysis and Determination of Optimal Debt Capacity Ratio for a Road Project", Korean Society of Civil Engineering, Vol. 16(7), 2012, pp. 1104-1114, Impact Factor: 0.484, Citations: Nil. (SCI)
- 99. Koner, S., Pal, A. and Adak, A., "Use of surface modified silica gel factory waste for removal of 2,4-D pesticide from agricultural wastewater: a case study." Int. J. Environ. Res., Vol. 6, No. 4, 2012, pp. 995-1006, Impact Factor: 1.1, Citations: 4, (SCI)
- 100.BeraAshis Kumar and Roy Arindom, "Engineering properties of Jute geotextile and its efficacy to the consolidation of soil"., Electronic Journal of Geotechnical Engineering, (ISSN: 1089-3032), USA, Vol. 17,2012, Bundle R, pp. 2631-2645, Impact Factor: 0.24 (Scopus)
- 101.Das Ajoy K, HaldarAchintya and Chakraborty S, Health Assessment of Large Two Dimensional Structures using Minimum Information – Recent Advances, Advances in Civil Engineering 2012, Article ID 582472, 16 pages doi:10.1155/2012/582472,IF: Nil, Citations: 4.(Scopus)
- 102.Pal S. K. and Ghosh A, "Hydraulic Conductivity of Fly Ash- Montmorillonite Clay Mixtures", Springer, Indian Geotechnical Journal, Vol., 2012, pp., Impact Factor : 0.3,(Scopus)
- 103. Chakraborty Ritwik and Ghosh Ambarish "Analysis of 1D contaminant migration through saturated soil media underlying aquifer using FDM." Journal of Hazardous, Toxic, and Radioactive Waste Mgmt., ASCE, Vol. 16(3), 2012, pp. 229-242, Impact Factor: Nil, Citations: 3. (Scopus)
- 104.Bagui,S.K. and Ghosh,A, "Evaluation of NPV at Risk." Jordan Journal of Civil Engineering, Vol. 6(2), 2012, pp. 243-254, Impact Factor: 0.103, Citations: Nil. (Scopus)
- 105.Saha, P., Sarkar, A. K. & Pal, M., "Speed Distribution of Heterogeneous Traffic on a Two-lane Highway Passing through Peri-urban Area", International Journal of Applied Engineering Research, vol. 7, no. 10, 2012, pp. 1115-1121, citation:Nil(Scopus).
- 106.Bakshi, S., Bhar, K. K., "Estimation of Discharge in Rivers using ANN Modeled Rating Curves", Jr. Inst. Engr. (I), Series A, Vol. 93, No. 3, 2012, pp 181-186. Citations: 1

107.Bhar, K. K., "Application of GIS in Public Healthcare Systems", CSI Communications, No. 2, 2012, pp 7-10.

- 108.Roy Bijan K and Chakraborty Subrata, Robust Optimum Design of Tuned Mass Damper In Seismic Vibration Control Of Structures Under Uncertain Bounded System Parameters, Int. J. of Life Cycle Reliability and Safety Engineering. 1(3), 8-15, 2012, Impact Factor: Nil
- 109.BaguiSwapan Kumar and Ghosh Ambarish, "Economic and financial analysis for polymer modified bitumen", Malaysian Journal of Civil Engineering Vol. 24(1), 2012, pp. 96-106., Impact Factor : 0.125, Citations: 3.
- 110.Metya, S. and Bhattacharya, G., "Slope Reliability Analysis using the First Order Reliability Method", SRESA Journal of Life Cycle Reliability and Safety Engineering, Vol. 1, Issue No. 3, pp. 1-7, 2012, Impact Factor: NIL, Citations: NIL.
- 111.Chowdhury, R., Flentje, P. and Bhattacharya, G, "Geotechnics in the 21st Century, Uncertainties and other Challenges with Particular Reference to Landslide Hazard and Risk Assessment." SRESA Journal of Life Cycle Reliability and Safety Engineering, Vol. 1, Issue No. 2, pp. 27-43, 2012, Impact Factor: NIL, Citations: NIL.
- 112.Biswas, S., "Estimation of Soil Erosion using Remote Sensing and GIS and Prioritization of Catchments." International Journal of Emerging Technology and Advanced Engineering, Vol. 2, No. 7, 2012, pp 124-128, Impact Factor : 2.324. Citations: 3.
- 113. Chakraborty Subrata, Efficient robust optimization of structures, ANNALS of INAE, Vol IX, 2012, 151-160.
- 114.Banerjee, R., Dutta, M., Roy, S. K., and Sinha, S.,(2012) "Evaluating the health cost of transport pollution", International Journal of Physical and Social Sciences pp. 81-96, October 2012.
- 115.HaitSubrata and MazumderDebabrata, "Performance evaluationofa shaft-typehybrid bioreactorfor the removal of carbonaceous organicmatter."International Journal of Environmental Engineering (IJEE); 4; 2012, 337-351.
- 116.Hait, Subrata and MazumderDebabrata, "Performance evaluation of a shaft-type hybrid bioreactor for the removal of carbonaceous organic matter", International Journal of Environmental Engineering (IJEE), Vol. 4, No. (3/4), 2012, pp. 337 351. Impact Factor : Not reported, Citations :.

Conference Proceedings

<u>2015</u>

- 1. Chakraborty, R., Ghosh, A. and Adak, A., "Electrokinetic remediation of chromium contaminated soil." Indian Geotechnical Conference 2015, Pune, 2015.
- 2. Koner, S. and Adak, A., "Adsolubilization of Methylene Blue Dye Using Surfactant Modified Silica Gel Waste." 47th Annual Convention of Indian Water Works Association, Kolkata, India, 2015.
- 3. Saha, P., Sarkar, A. K. & Pal, M., "Assessment of Level-of-Service of Two-Lane Highways with Heterogeneous Traffic", 94th Annual Meeting of the Transportation Research Board (TRB), Transportation Research Board of the National Academics, Washington, D.C., 2015. (compendium of papers: ID-15-2723)
- Roy, R., Saha, P. & Sarkar, A. K., "Time Headway Modeling of Mixed Traffic on Two-Lane Highways." 3rd Conference of the Transportation Research Group of India (3rd CTRG), Kolkata, 2015. (compendium of papers: ID-563)
- 5. Das, S., Mukherjee, D., Saha, P. & Roy, S. K., "Characteristics of Pedestrian Traffic on Sidewalks: a case study in Kolkata Metropolis", 3rd Conference of the Transportation Research Group of India (3rd CTRG), Kolkata, 2015, (compendium of papers: ID-626)
- 6. Saha, P., Sarkar, A. K. & Pal, M., "Preferred Time Headway of Drivers on Two-Lane Highways with Heterogeneous Traffic", Proc. National Conf. on Recent Advances in Traffic Engineering SVNIT Surat, 2015. (compendium of papers: ID-182).
- Soumykanta Ray and ChanchalMjuamder., "A Low Cost Surface Water Treatment Method for Community Scale Drinking Water Supply." Indian Water Works Association (IWWA), 47th Annual convention kolkata, 30th Jan-1st Feb, 2015, pp.225-231, (Paper ID:130).

- 8. Bera, R., Roy, D., Chakraborty, S. and Roy, S. K., "Speed and Acceleration Behavior of Different Category of Vehicle on Multilane Highways." Recent Advances in Traffic Engineering (RATE-2015),2015, Paper No. 123, SVNIT, Surat, Citations- NIL.
- 9. Rai, P. and Roy, S. K., "Saturation Flow Modelling and Level of Service Analysis of Signalized Intersections at Kolkata." Recent Advances in Traffic Engineering (RATE-2015), 2015, Paper No. 152, SVNIT, Surat, Citations- NIL.
- Mondal, S., Chakraborty, S. and Roy, S. K., "Estimation of Passenger Car Unit for Heterogeneous Traffic Stream of Urban Arterials: Case Study Kolkata." Recent Advances in Traffic Engineering (RATE-2015), Year-2015, Paper No. 153, SVNIT, Surat, Citations- NIL.
- 11. Pal, S. and Roy, S. K., "Modelling Roadside Friction and Its Impact on Travel Speed of Indian Rural Highways –A Case Study." Recent Advances in Traffic Engineering (RATE-2015),2015,Paper No. 141,SVNIT, Surat,Citations- NIL.
- Roy, A., Banik G. C., Pandit, S., Paul, S.K. and Roy, S. K., "Forecasting of Travel Demand Characteristics in Aizwal City." Recent Advances in Traffic Engineering (RATE-2015),2015, Paper No. 152, SVNIT, Surat, Citations- NIL.
- 13. Bera, R., Roy, D., Chakraborty, S., Arun, A. and Roy, S. K, "Speed-Flow Estimation for Four Lane and Six Lane Divided National Highways in India." Conference of Transportation Research Group (CTRG-2015) Kolkata, 2015, Paper No. 666, Citations- NIL.
- Banerjee, A., Roy, S. K. and Maurya, A., "Study of Pedestrian Movement on Functionally Different Types of Sidewalks in Kolkata" "Conference of Transportation Research Group (CTRG-2015)" Kolkata, Paper No. 674, Year-2015, Citations- NIL.
- Das, S., Mukherjee, D., Saha, P. and Roy, S. K, "Characteristics of Pedestrian Traffic on Sidewalks: A Case Study in Kolkata Metropolis." Conference of Transportation Research Group (CTRG-2015) Kolkata, 2015, Paper No. 626, Citations- NIL.
- 16. Pal, S. and Roy, S. K., "Impact of Roadside Friction on Travel Speed and LOS of Rural Highways in India." Conference of Transportation Research Group (CTRG-2015) Kolkata, 2015, Paper No. 672, Citations- NIL.
- 17. Roy, T.K., "A Study on the Utilization of Tire Rubber on Bituminous Mixes." Proceedings of theInternational Symposium on Engineering and Natural Sciences Beijing, China (2015) (In CD: Paper ID 2092).
- Sarkar, Sushovan and Mazumder, Debabrata, "A novel approach to modelling of an aerobic hybrid bioreactor treating easily biodegradable substances", International Conference on Environment and Ecology; held during March 2 - 4, 2015, at Science City, Kolkata, ICEE-2015.
- 19. Goswami, Supriyo and Mazumder, Debabrata, "Kinetics of treatment of composite chrome tannery wastewater using activated sludge", International Conference on Environment and Ecology; held during March 2 4, 2015, at Science City, Kolkata, ICEE-2015.
- 20. Chatterjee, Biswabandhu and Mazumder, Debabrata, "A study on stabilization of organic fraction of Municipal Solid Wastes (OFMSW) in a three-stage Anaerobic Digester", International Conference on Environment and Ecology; held during March 2 4, 2015, at Science City, Kolkata, ICEE-2015.
- 21. Sarkar, Sushovan and Mazumder, Debabrata, "Development of kinetics of wastewater treatment in the aerobic hybrid bioreactor", International Conference on New Frontiers in Chemical, Energy and Environmental Engineering; held during March 20 21, 2015, at NIT, Warangal, Warangal, INCEEE-2015.
- 22. Loganath R and Mazumder, Debabrata, "Optimization of COD removal by UASB reactor : model development by Factorial Design", International Conference on New Frontiers in Chemical, Energy and Environmental Engineering; held during March 20 21, 2015, at NIT, Warangal, Warangal, INCEEE-2015.
- 23. Goswami, Supriyo, Sarkar, Sushovan and Mazumder, Debabrata, "Development of kinetics of wastewater treatment in the aerobic Biofilm reactor", International Conference on New Frontiers in Chemical, Energy and Environmental Engineering; held during March 20 21, 2015, at NIT, Warangal, Warangal, INCEEE-2015.
- 24. Chatterjee, Biswabandhu and Mazumder, Debabrata, "Application of three-stage Anaerobic Digestion (AD) in the stabilization of Organic Fractions of Municipal Solid Wastes (OFMSW)", 5th International Conference on Solid Waste Management, held during November 24 27, 2015 at Indian Institute of Science, Bangalore, INCEEE-2015, pp 640 646.
- 25. Sarkar, Sushovan and Mazumder, Debabrata, "Determination of Kinetic Coefficients for Municipal Wastewater treatment in an aerobic Biofilm Reactor", 47th Convention of Indian Water Works Association (IWWA), held on 30th January 1st February, 2015 in Science City, Kolkata, Available in CD, pp 330-336.

26. Goswami, Supriyo, Sarkar, Sushovan and Mazumder, Debabrata, "Determination of kinetic coefficients for the treatment of Chrome Tannery wastewater in an aerobic Hybrid Bioreactor", 47th Convention of Indian Water Works Association (IWWA), held on 30th January – 1st February, 2015 in Science City, Kolkata, Available in CD, pp 337-343.

<u>2014</u>

- 27. Mangalgiri, K., Blaney, L. and Adak, A., "Treatment of agricultural wastewater containing organoarsenical using UV-based processes." Tri-Association Conference (Ocean City, MD), 2014.
- Koner, S. and Adak, A., "Methyl Orange Dye Removal Using Surfactant Modified Silica Gel Waste a Fixed Bed Column Study." International Conference on Recent Trends and Challenges in Civil Engineering, 2014 MNNIT Allahabad.
- SubhasisChakraborti, Ajeesh Kumar N.S. and SoumyaBhattacharjya, "Robust Design Optimization o Reinforced Concrete Folded Plate Structures Including Parameter Uncertainty." In Proc. of SEC 2014, V Matsagar (ed.), Modeling, Simulation and Analysis, Dec, 2014 IIT, Delhi, India.
- Datta,S., Bera, A.K., and Chattopadhyay, K.K.., "Effect of size o reinforcement on bearing capacity of footing on reinforced sand using ABAQUES." IGC Kakinada, 2014, pp 1475-1479.
- Bera, A.K. and Hazra, S., "Effect of RHA content on engineering properties of clayey soil RHA mixture." IGC Calcutta (Kolkata Chapter), 2014, pp. 82-84.
- Chakraborty, S. and Bera, A.K., "Strength Characteristics o Geotextile reinforced sand fly-ash composite material." IGC Kakinada, 2014, pp.1056-1059.
- 33. Roy, Achintya Kumar and Ghosh, Aparna (Dey), "Passive Contro of Structural Vibrations due to Near-Source Ground Motions by the Compliant LCD." *Proc.* 6th World Conference on Structural Control and Monitoring, (6WCSCM), 2014,
- 34. Roy, A. K. and Ghosh, A. (Dey), "A Study on the Design Parameters of the Compliant LCD for Structural Vibration Control under Near Fault Earthquakes."*Proc Structural Engineering Convention (SEC 2014), Advances in Structural Engineering: Dynamics,* 2014, vol. 2, pp .1243-1255.
- 35. Majumder, Rohan and Ghosh, Aparna (Dey), "Performance Study of a SMA Bracing System for Control of Vibration due to Underground Blast Induced Ground Motion."*Proc.Structural Engineering Convention (SEC 2014), Advances in Structural Engineering: Mechanics* 2014, vol. 1,pp. 393-404.
- 36. SomdattaGoswami and Subrata Chakraborty, "Adaptive response surface method based efficient monte carle simulation." Accepted for 2ndIntConf on Vulnerability and Risk Analysis and Management (ICVRAM2014), 13 16 July 2014, University of Liverpool, UK.
- Sahis, M.K., Bhattacharya, G., and Chowdhury, R., "Reliability Analysis of Rainfall Induced Slope Instability o Unsaturated Soil Slopes." Proceedings of the Sixth International Conference on Unsaturated Soils, UNSAT 2014, Sydney, Australia, July 2-4, 2014, Vol. II, pp. 1287-1293.
- Haldar, D. and Bhattacharya, G., "A Comparison of Methods for Estimation of Earthquake Induced Permanen Deformations of Slopes." Proceedings of the Indian Geotechnical Conference, 2014 (IGC 2014), December 18-20, 2014, pp. 398-404, Kakinada, India.
- Metya, S., Halder, K., Pramanik, R., and Bhattacharya, G., "Reliability Prediction of Slope Stability of a Zoned Dam using Spreadsheet based Simulation Technique." Proceedings of the Indian Geotechnical Conference, 2014 (IGC 2014), December 18-20, 2014, pp. 2082-2089, Kakinada, India.
- Sahis, M.K., and Bhattacharya, G. (2014), "Probabilistic Analysis of an Unsaturated Soil Slope after Rainfal Infiltration." Proceedings of the Indian Geotechnical Society, Kolkata Chapter, CGCRI, Kolkata, 28th Feb. – 1s Mar., 2014, pp. 43 – 46.
- 41. Moumita Sit and Chaitali Ray, "Bending behaviour of FRP bridge deck under vehicle load using Higher orde shear deformation theory." Proceedings, ICTACEM, IIT Kharagpur, 29-31 December, 2014. (Paper ID 107)
- 42. Dhiraj Biswas and Chaitali Ray, "Free vibration analysis of GFRP laminates by experimental and numerica investigations." Proceedings ICTACEM, IIT Kharagpur, 29-31 December, 2014. (Paper ID 107)

- 43. SouravMondal and Chaitali Ray, "Experimental validation of finite element modal analysis of steel plates. Proceedings, 59th ISTAM, Bangalore, 17-20 December, 2014
- 44. Moumita Sit, Dhiraj Biswas and Chaitali Ray, "Thermal stress analysis of laminated composite plates using thin order shear deformation theory." Proceedings in the Structural Engineering Convention, IIT Delhi, 22-24 December, 2014. (Paper ID AMP 14)
- 45. Dhiraj Biswas and Chaitali Ray, "Experimental and numerical modal analysis of laminated composite plates with GFRP." Proceedings in the Structural Engineering Convention, IIT Delhi, 22-24 December, 2014. (Paper II AMO 006)
- 46. Bibekananda Mandal and Chaitali Ray, "Bending of FRP bridge deck under the combined effect of thermal and vehicle load." Proceedings in the Structural Engineering Convention, IIT Delhi, 22-24 December, 2014. (Pape ID AMO 5)
- 47. Chaitali Ray, "Laminated Composites as Building Materials in Indian Scenario." Institute of Engineer Convention held on 30th -31st January, 2014 at the Institute of Engineers, Kolkata.
- 48. Moumita Sit, Chaitali Ray and DhirajBiswas."Thermal stress analysis of laminated composite plates using third order shear deformation theory." Advances in Structural Engineering, 149-156, also presented in SEC 2014, IIT Delhi.
- 49. Dhiraj Biswas and Chaitali Ray, "Experimental and numerical modal analysis of laminated composite plates with GFRP." Advances in Structural Engineering, 55-66, also presented in SEC 2014, IIT Delhi.
- 50. Bibekananda Mandal and Chaitali Ray, "Bending of FRP bridge deck under the combined effect of thermal and vehicle load." Advances in Structural Engineering, 2493-2503, also presented in SEC 2014, IIT Delhi.
- 51. ChanchalMajumder and SoumyaKanta Ray, "Optimization of electrocoagulation process for turbidity removal by response surface method using central composite design (CCD)."International Conference on Recent Trends and Challenges in Civil Engineering(RTCCE-2014), 5-7th Nov. 2014, pp.24-25, MNNIT, Allahabad.
- 52. ChanchalMajumder, "Mesoporous Iron Adsorbent: A novel technique for arsenic removal from contaminated water." International Conference on Material and Environmental Engineering March 21th -23th, 2014, pp.80-83, Jiujiang, China.
- 53. ChanchalMajumder, "Doehlert design experiment to optimize pH for removal of turbidity from surface water by electrocoagulation." International Conference on Civil Engineering for Sustainable Development. Khulna University of Engineering and Technology. 13-15 February, 2014 (*ICCESD-2014*), pp80-82.
- 54. Bera, R., Arun, A., Chakraborty, S. and Roy, S. K., "Speed Flow Estimation for Four Lane Divided National Highways in India." Proceedings of "National Conference on Recent Research Advances in Civil Engineering", Osmania University, UCE, Hyderabad, 2014, pp.14-21, Citations- NIL.
- 55. Roy, T.K., "Study on the performance of bitumen with addition of plastic waste and crumb rubber" Proceedings of the 10th International Conference on Geosynthetics (10ICG) & 33. Baugrundtagung, Berlin, Germany (2014) (In CD: Paper ID 217).
- 56. Roy, A., Datta, T. and Roy, T.K., "Stress-strain analysis in flexible pavement in rural roads." Proceeding on the Indian Geotechnical Conference (IGC), Kakinada, Andhra Pradesh, India (2014).
- 57. Rai P., and . Roy, S.K. (2014) "Analysis of Capacity and Level of Service of Signalized Intersection: Case Study in Kolkata", International Conference on Recent Trends & Challenges in Civil Engineering – 2014, MNNIT Allahabad, December 12-14, 2014.
- 58. Sarkar, Sushovan and Mazumder, Debabrata, "Determination of Kinetics Coefficients for Municipal Wastewater Treatment in Aerobic Hybrid Bioreactor", International Conference on Recent Trends and Challenges in Civil Engineering, held on December 12-14, 2014 at MNNIT Allahabad, India, RTCEE-2014, pp. 178-183.
- 59. Goswami, Supriyo, Sarkar, Sushovan and Mazumder, Debabrata, "Determination of Kinetic co-efficient for Chrome Tannery Wastewater Treatment in an Aerobic Biofilm Reactor", International Conference on Recent Trends and Challenges in Civil Engineering, held on December 12-14, 2014, at MNNIT Allahabad, India, RTCEE-2014, pp. 184-189.

- 60. Ghosh, A. (D.), Bhattacharyya, S. and Roy, A., "On the seismic performance of elevated water tanks and their control using TLDs.", 10th International Conference on Damage Assessment of Structures, (DAMAS) and in Key Engineering Materials, 2013, vol.569-570, pp. 270-277. Impact factor: 0.19
- 61. Mondal, K.K. and Ghosh, A. (D.), "Seismic vibration control of primary-secondary systems by the TLCD.", *Proc. Vienna Congress on Recent Advances in Earthquake Engineering and Structural Dynamics (VEESD)*, Paper No. 537, 2013.
- 62. Roy, A. and Ghosh, A. (D.), "Tuned Liquid Damper System for Seismic Vibration Control of Elevated Water Tanks."*Proc. International Conference on Structural Engineering and Mechanics, (ICSEM)*, (CD: Parallel Session 5A, Paper 04), 2013.
- 63. Bhattacharyya, S. and Ghosh, A. (D.), "Effect of Mass ratio on the Performance of a TMD with non-optimal damping.", *Proc. International Conference on Structural Engineering and Mechanics, (ICSEM)*, (CD: Parallel Session 5A, Paper 01), 2013.
- 64. Dutta Majumdar, J. and Ghosh, A. (D.), "Control of Wind-induced Vibration in Transmission Line Towers using Tuned Liquid Column Damper." *Proc. International Conference on Structural Engineering and Mechanics, (ICSEM)*, (CD: Parallel Session 5A, Paper 02), 2013.
- 65. Roy, A. K. and Ghosh, A. (D.), "Control of Structural Vibrations due to Near-Fault Earthquake by Compliant Liquid Column Damper." *Proc. 58th Congress of International Society of Theoretical and Applied Mechanics (ISTAM)*, (abstract id: 58-istam-sm-a-1), 2013.
- 66. Majumder, R. and Ghosh, A. (D.), "Control of Structural Vibrations due to Underground Blast using SMA dampers.", *Proc. 58th Congress of International Society of Theoretical and Applied Mechanics (ISTAM)*, (abstract id: 58-istam-sm-a-2), 2013.
- 67. SoumyaBhattacharjya and UrmiSaha, "Reliability Based Optimal Design of Steel Conveyer Gallery Structure considering Parameter Uncertainty in Latest IS: 800-2007 Framework." 58th Congress of ISTAM-2013, December 2013, BESU, Shibpur, India (Paper code: 58-istam-sm-fp-42 in CD).
- 68. SoumyaBhattacharjya, UrmiSaha, AshisModak, and BaidyanathSarker, "Probabilistic Assessment of Safety, Economy and Robustness of Steel Structure Including Parameter Uncertainty in IS: 800-2007 Format." International Conference on Structural Engineering and Mechanics, Dec 20-22, 2013, pp 356-362, National Institute of Technology Rourkela, Odisha, India.
- 69. Bhar, K. K., Chaudhury, B., Chakraborty, K., Pant, H. J., "Studies on Sediment Dynamics in Estuaries using Radiotracer for Management of Dredging Works." CERF-2013, 22nd Biennial Conference of the Coastal and Estuarine Research Federation, San Diego, California, USA, 3-7 November, 2013.
- Roy, S.K., Ghosh, A, Bera, A.K., and Chakraborty, S. "Load settlement behaviour of Jute geotextile reinforced subgrade of rural road using ABAQUES." National Seminar on Jute Geotextiles, Calcutta, 2013. pp.61-72.
- 71. S. Mondal, S, Patra, Bera, A.K., "Effect of u / B ratio on bearing capacity of footing on reinforced sand: a FEM based analysis." IGC Roorkee, 2013.
- 72. Subrata Chakraborty and Rama Debbarma, "Optimum design of liquid column dampers under uncertainty." International Conference on Structural Engineering and Mechanics (ICSEM 2013) 20th -22nd Dec. 2013 at NIT Rourkela, Odisha.
- 73. ShyamalGhosh and Subrata Chakraborty, "A comparative study on efficient fuzzy structural response analysis." ISTAM 2013, BESU Shibpur
- 74. Rama Debbarma, S. Chakraborty, "Robust optimum design of liquid column dampers in seismic vibration control." *Intconf on advance s in Civil, Struct, EnvEngg*, Oct 12-13, 2013 Zurich Switzerland.
- 75. Bijan Kumar Roy and Subrata Chakraborty, "Reliability based design of TMD system considering system parameter uncertainty in seismic vibration control." Int.conf. on Struct.Engg.and Mech. (ICSEM-2013), Dec 20-22, NIT Rourkela.
- 76. SomdattaGoswami, Shymal Ghosh and Subrata Chakraborty, "Adaptive Response Surface Method Based Efficient Monte Carlo Simulation", Int. conf. on Struct. Engg.and Mech. (ICSEM-2013, Dec 20-22, NIT Rourkela.
- 77. Metya, S. and Bhattacharya, G., "Reliability Evaluation of Earth Slopes Using FORM." Proceedings of the Indian Geotechnical Conference, 2013 (IGC-2013), at IIT Roorkee, India, December 22-24, 2013.
- Roy, R., Ghosh, D. and Bhattacharya, G., "Estimating Instability of Slopes during Earthquakes: A Simple Framework." Proceedings of the Indian Geotechnical Conference, 2013 (IGC-2013), at IIT Roorkee, India, December 22-24, 2013. Citation: 1

- Roy, T.K., "Evaluation of Strength of Clayey Soil by UCS Test with Addition of Rice husk ash and Lime." Proceedings of the Seventh International Conference on Case Histories in Geotechnical Engineering, Chicago, USA (2013) (In CD: Paper ID - 43).
- Roy, T.K., "Effect of sand on strength characteristics of expansive soil for using as Subgrade of pavement." Proceedings of the International Conference on Engineering and Applied Science, Osaka, Japan (2013) (In CD: Paper ID - 475).
- Roy, T.K., "A study on strength characteristics of alluvial soil with addition of laterite and sand for using as roadway subgrade." Proceedings of the Asian Conference on Civil, Material and Environmental Sciences, Osaka, Japan (2013) (In CD: Paper ID - 1852).
- 82. Roy, T.K. "Influence of sand on strength characteristics of cohesive Soil for using as Subgrade of road." Proceeding on the National Seminar on 2nd Conference of Transportation Research Group of India (CTRG), Agra, India(2013) (In CD: Paper ID – 301).
- Kuity, A. and Roy, T.K. "Utilization of Geogrid mesh for improving the soft subgrade layer with waste material mix compositions." Proceeding on the National Seminar on 2nd Conference of Transportation Research Group of India (CTRG), Agra, India(2013) (In CD: Paper ID – 327).

<u>2012</u>

- 84. Murmu, S., and Biswas, S., "Application of Remote Sensing and GIS Technique in Runoff estimation of a Catchment using SCS CN model." Regional Conference of the International Network of Women Engineers & Scientists, 2012.
- 85. Saha, P., Sarkar, A. K. & Pal, M., "Study of traffic characteristic on a National Highway passing through peri-urban area in Agartala, Tripura." *Proc. National Conf. on Urban Mobility-Challenges, Solutions and Prospects, IIT Madras*, 2012, pp. 84-86.
- 86. ChanchalMajumder, "A systematic study and statistical inferences on electrocoagulation design parameters with reference to arsenic removal." International symposium on Engineering under Uncertainty: Safety Assessment and Management". BESU Shibpur, Howrah, West Bengal, January 4-6, 2012.
- 87. Roy, T.K., Roy, S.K. and Kuity, A., "Prediction of soaked CBR for subgrade layer by using Artificial Neural Network model." Proceedings of theInternational symposium onEngineering under Uncertainty: Safety Assessment and Management (ISEUSAM-2012) organized by BESUS at West Bengal, India (2012).
- 88. Roy, T.K., "Performance of Sediment of Water Treatment Plant on Compaction and Strength Properties for Addition of Sandy Soil." Proceeding on the Indian Geotechnical Conference (IGC) at Delhi, India (2012).
- 89. Ashis Kumar Bera and SamratGhose, "Effect of position of ties and vertical spacing on uplift capacity of anchor with ties on sand." Proceedings of Indian Geotechnical Conference, Delhi, 2012 Pp.560-563.
- Ashis Kumar Bera, Prithwish Bhattacharya, and Amalendu Ghosh, "Effect of jute geotextile on consolidation properties of soil." Proceedings of National Conference on Pervasive Computing and Communications, 2012, pp.111-114Budge Budge, Kolkata.
- Bibekananda Mandal and Chaitali Ray, "Shear buckling capacity of laminated stiffened plates with diverse stiffener configurations." Proceedings of 57th ISTAM Congress (An International meet) at Pune, December 17to 20, 2012.
- 92. SomnathMajumder, Bibekananda Mandal, SriparnaDey and Chaitali Ray, "Static and free vibration analysis of laminated orthotropic plates using FEM and B3 spline finite strip method." Proceedings 57th ISTAM Congress (An International meet) at Pune, December 17to 20, 2012.
- 93. Nilanjana Sen and Chaitali Ray, "Thermal buckling safety assessment of laminated plates with optimum fibre weight fraction." International Symposium on Engineering under Uncertainty: Safety Assessment and Management. January4 to 6, 2012.
- 94. Srabasti Sinha Roy, Suprakash Sarkar and Sujata Biswas, "Drought risk assessment using GIS and remote sensing." *Proc. of Int. Symposium on Engineering under Uncertainty: Safety, Assessment and Management (ISEUSAM)*, BESU Shibpur, 2012, pp 849-857.

- Ghosh, A. (D.), Saha, P. C. and Basu, B, "Study of a tank-pipe damper system for seismic vibration control of structures." Proc. 15th World Conference on Earthquake Engineering (15WCEE), 2012, vol. 33, pp. 26098-26107, Citations: 1.
- 96. Roy, A. and Ghosh, A. (D.), "Design of a tuned liquid damper system for seismic vibration control of elevated water tanks." Proc. International Symposium on Engineering under Uncertainty: Safety Assessment and Management (ISEUSAM), BESU Shibpur, , 2012, vol. I, pp. 549-562.
- 97. Bhattacharya, S. and Ghosh, A. (D.), "A frequency domain study on the seismic response mitigation of elevated water tanks by multiple tuned liquid dampers." Proc. International Symposium on Engineering under Uncertainty: Safety Assessment and Management (ISEUSAM), BESU Shibpur, 2012, vol. I, pp. 603-618.
- 98. Bhattacharya S. and Ghosh, A. (D.), "Seismic vibration control of elevated water tanks by multiple tuned liquid dampers." Proc. ISET Golden Jubilee Symposium, Paper No. E009, 2012.

Book Chapter

- 1. Saha, P., Pal. M. & Sarkar, A. K., "Study on percent time-spent following: a performance measure for twolane highways", *Advances in Civil Engineering and Building Materials*, Taylor & Francis Group, London, 2013, pp. 899-902, Citation: Scopus (1-Jurnal Teknologi).
- 2. P. Samui, S. Chakraborty and D. Kim (Eds.) Modeling and Simulation Techniques in Structural Engineering, , IGI Global, Hershey PA, USA (In Progress)
- Chakraborty, Subrata; Bhattacharya, Gautam (Eds.), Proceedings of the International Symposium on Engineering under Uncertainty: Safety Assessment and Management (ISEUSAM - 2012), Springer, IISBN 978-81-322-0756-6, DOI 10.1007/978-81-322-0757-3, 2013
- 4. S Bhattacharjya and S Chakraborty, Efficient robust optimization of structures subjected to earthquake load and characterized by uncertain bounded system parameters In Structural Seismic Design Optimization and Earthquake Engineering: Formulations and Applications Eds. Plevris V, Mitropoulou, C Lagaros, ND, IGI Global, Hershey PA, USA, ISBN 978-1-4666-1640-0 (hardcover)- ISBN 978-1-4666-1641-7(ebook), 2012, 105-127

Mining Engineering

Journal Papers, Impact Factor and citations (Citations from Google Scholar database) 2012-15

- 1. Dey N. C., Nath S., Sharma G. D., Dey S. C., "An Inventory approach to humanizing work and work environment in Indian underground coal mines", **Research Updates in Medical Sciences** (**RUMeS**), ISSN-2289-2141, Vol 3, Issue 3, Page 10-18. **Impact Factor: 0.652**
- <u>Dey</u> N. C., Sharma G D and Dey Shibaji ,"An ergonomic study of health of Drillers working in an underground coal mine with adverse environmental conditions", MGMI Transactions ISSN 0254-8003; Vol. 111, 2015, page (58 - 65).
- 3. <u>Dey</u> N. C., Sharma G D and Nath S, Mallik A; "Environmental impact on physiological responses of underground coal miners in eastern part of India", **Journal of Human Ergology, Japan, ISSN 35**-4144; Vol 43, No.2. **Impact Factor 2.472**

- Mohan V and Dey NC; "Assessment of ground vibration and plotting of contour map of surface mine blasting" Springer Issue (Journal of the Institution of Engineers, India): DOI 10.1007/s40033-014-0037-5 Series D: ISSN 2250-2122, March (2014), Pages 1-6., Impact Factor 2.48
- 5. Dey N. C., Pal S ,"An ergonomic outlook of the workload of underground coal miners, MGMI Transactions, ISSN 0371-9538; Vol. 109, 2013, page (39 44)
- <u>Saha</u> R, <u>Dey</u> N. C., Sharma G D and Nath S; "Cardiovascular Demand of Roof Drilling Job in Coal Mines of Eastern India" Research updates in Medical Sciences, Malaysia, volume 1, ISSN-2289-2141, Issue 2 : 2013 : 21-29. Impact Factor: 0.652
- Dey N. C., Dhara Sharma G, "A Critical Study on the Underground Environment of Coal Mines in India - an Ergonomic Approach" Springer Issue (Journal of the Institution of Engineers, India): Series D: Volume 94:1-6, DOI 10.1007/s40033-013-0023-3; ISSN 2250-2122Issue 1, April (2013), Pages 1-6. Impact Factor 2.48(cited by 1)
- 8. Dey N. C., Pal S., "A look into miners health in prevailing ambience of underground coal mine environment", **Springer Issue** (Journal of The Institution of Engineers, India): Series D: ISSN 2250-2122, Volume 93, Issue 1, May (2012), Page 37-42. **Impact Factor 2.48 (Cited by 1)**
- 9. Ecological footprint: An indicator of environmental sustainability of a surface coal mine". Published in the Journal Environment, Development and Sustainability. Springer Science. pp 1-17, First online: 05 February 2016. Impact Factor: 1.040
- 10. Development of an artificial neural network model on dust propagation in a surface mine and knowledge extraction from the model Pnternational Journal of Engineering and Scientific Research Vol 2 Issue 107-118, 2014
- 11. Soil moisture retrieval model by using RISAT 1, C-band data in tropical dry and sub-humid zone of Bankura district of India", published in the Egyptian Journal of Remote Sensing and Space Sciences, 2015, Vol. 18, Issue 2, PP 297-310, Impact Factor 0.590. Citation 0
- 12. Present status of soil moisture estimation by microwave remote sensing", Cogent Geosciences, Vol1, 2015, PP 1-21. Citation 1.
- 13. Creation of a web portal for dissemination of accident information of underground coal mines of Eastern Coalfields Limited, India, using web GIS, Int. J. Mining and Mineral Engineering, Vol 7 (1), 2016, PP 78-88, Impact Factor 0.28, Citation 0.
- Adsorption rate characteristics of methane and CO₂ in coal samples from Raniganj and Jharia coalfields of India, International Journal of Coal Geology, 113 (2013), 50-59, Impact Factor 3.726, Citations 12
- 15. Dutta P. and Zoback, M.D.: CO₂ sequestration into the Wyodak coal seam of Powder River Basinpreliminary reservoir characterization and simulation, *International Journal of Greenhouse Gas Control*, 9(2012), 103-116, **Impact Factor 4.726**, **Citations 6**

Seminars/conferences

- 1. Dey N C, Somesh Vikrant :"Online work capacity monitoring and work-rest scheduling for different job nature of underground miners", International Conference 37th APCOM 2015 of SME during May 23-27, 2015, page 1080-1087.
- 2. Nath S, Sharma G D; "Adaptive changes in cardiovascular homeostasis due to heat acclimatization in underground coal miners of eastern India" International symposium on environmental management and current practices in Mining & Allied Industries, Department of Mining Engineering, BHU-IIT, pages 491-502.
- 3. Nath S, Dey N C, Sharma G D :"Impact of seasonal variation of environment on the workload of explosive carriers in underground coal mines of eastern India" published in the International conference on Coal and Energy-technological advances and future challenges (CETAFC 2013), organized by Department of Mining Engineering, BESU Shibpur, pages 289-302.
- 4. Sharma G D, Dey N C, Nath S :"A glimpse on job heaviness of roof bolt drillers in eastern coalfields of India: A comparative approach" presented and published in the International conference on Coal and Energy-technological advances and future challenges (CETAFC 2013), organized by Department of Mining Engineering, BESU Shibpur, pages 312-322.
- 5. Podder S and Dey N. C:"Effect of heat stress on the health strain of industrial workmen- A case study in chemical industry in India" presented and published in the International conference on Indian mineral industry, organized by IMEJ, Bhubaneswar, pages 117-120.
- 6. Dey N.C and Pal S:"Effect of environment on the physiological workload and work stretch of underground coal miners in india" published in International symposium on Engineering under Uncertainty: Safety Assessment and Management January 4-6, 2012 organized by Dept of Civil Engg, BESU Shibpur.

PHYSICS

(i) Journals:

- <u>Amrita Ghosh</u>, <u>Mousumi Mitra</u>, <u>Dipali Banerjee</u> and <u>Anup Mondal</u>, "Facile electrochemical deposition of Cu₇Te₄ thin films with visible-light driven photocatalytic activity and thermoelectric performance", RSC Advance, 6, 2016, 22803-22811, Impact factor-3.84, Google Scholar citation-0, Scopus-0.
- Amrita Ghosh, Chiranjit Kulsi, Dipali Banerjee and Anup Mondal, "Galvanic synthesis of Cu_{2-x}Se thin films and their photocatalytic and thermoelectric properties", <u>Applied Surface Science</u>, 369, 2016, 525-534, Impact factor-2.711, Google Scholar citation-0, Scopus-0.

- Chiranjit Kulsi, Mousumi Mitra, Kajari Kargupta, Saibal Ganguly, Dipali Banerjee and Shyamaprosad Goswami, "Effect of different surfactants and thicknesses on electrodeposited films of bismuth telluride and its thermoelectric performance" Materials Research Express 2 (10), 2015, 106403, Google Scholar citation-0, Scopus-0.
- 4. C Kulsi, M Mitra, K Kargupta, S Ganguly and D Banerjee, "Effect of solvent on nanostructure and thermoelectric properties of bismuth" Indian Journal of Physics (In press published online 17th October, 2015), Impact factor- 1.377, Google Scholar citation-0, Scopus-0.
- T Paul, D Banerjee and K Kargupta, "<u>Conductivity of phosphoric acid: an in situ comparative study of proton in phosphoric acid fuel cell</u>," Ionics, 2015, 1-8, Impact factor-1.754, Google Scholar citation-0, Scopus-0.
- Mousumi Mitra, Chiranjit Kulsi, Krishanu Chatterjee, Kajari Kargupta, Saibal Ganguly, Dipali Banerjee and Shyamaprosad Goswami, "Reduced grapheme oxide-polyaniline composites-synthesis, characterization and optimization for thermoelectric applications", RSC Advances, 5, 2015, 31039-31048, Impact factor- 3.84, Google Scholar citation-9, Scopus-5.
- Shubhanwita Saha, Saibal Ganguly, Dipali Banerjee and Kajari Kargupta, "Novel bimetallic graphene-cobalt-nickel (G-Co-Ni) nano-ensemble electrocatalyst for enhanced borohydride oxidation", International Journal of Hydrogen Energy, 40, 2015, 1760-1773, Impact factor-3.313, Google Scholar citation-2, Scopus-1.
- P. Ghosh, D. Halder, S. Ganguly, D. Banerjee and K. Kargupta, "Phosphosilicate gelpolybenzimidazole nanocomposite novel membrane for fuel cell application", International Journal of Plastics Technology, 18 (3), 2014, 403-408, Google Scholar citation-0, Scopus-0.
- 9. Shubhanwita Saha, Vaswar Basak, Anish Dasgupta, Saibal Ganguly, Dipali Banerjee and Kajari Kargupta, "Graphene supported bimetallic G-Co-Pt nanohybrid catalyst for enhanced and cost effective Hydrogen generation", International Journal of Hydrogen Energy, 39 (22), 2014, 11566-11577, Impact factor-3.313, Google Scholar citation-10, Scopus-7.
- Ananta Kr Sarkar, Shubhanwita Saha, Saibal Ganguly Dipali Banerjee and Kajari Kargupta, "Hydrogen Storage on Graphene using Benkeser Reaction", International Journal of Energy Research, 38 (14), 2014, 1889-1895, Impact factor-2.418, Google Scholar citation-2, Scopus-1.
- Tanmoy Paul, Mrinal Seal, Dipali Banerjee, Saibal Ganguly, Kajari Kargupta and Pabitra Sandilya, "Analysis of drying and dilution in phosphoric acid fuel cell (PAFC) using galvanometric study and electrochemical impedance spectroscopy" *J. Fuel Cell Sci. Technol*, 11(4), 2014, 041001, Google Scholar citation-3, Scopus-2.

- 12. Krishanu Chatterjee, Mousumi Mitra, Saibal Ganguly, Kajari Kargupta and Dipali Banerjee, "Thermoelectric performance of electrodeposited nanostructured polyaniline doped with sulfo-salicylic acid", Journal of Applied Polymer Science, 131 (4), (2014) 39920, Impact factor- 1.768, Google Scholar citation-6, Scopus-3.
- 13. Krishanu Chatterjee, Mousumi Mitra, Kajari Kargupta, Saibal Ganguly and Dipali Banerjee, "Synthesis, characterization and enhanced thermoelectric performance of structurally ordered cable-like novel polyaniline–bismuth telluride nanocomposite" Nanotechnology, 24, (2013) 215703 (10pp), Impact factor-3.821, Google Scholar citation-17, Scopus-14.
- Mousumi Mitra, Krishanu Chatterjee, Kajari Kargupta, Saibal Ganguly and Dipali Banerjee "Reduction of graphene oxide through a green and metal-free approach using formic acid", Diamond & Related Materials, 37, (2013) 74–79, Impact factor-1.919, Google Scholar citation-14, Scopus-10.
- 15. Saibal Ganguly, Sonali Das, Kajari Kargupta and Dipali Banerjee, "Reduced Order Inferential Model based Optimization of Phosphoric Acid Fuel Cell (PAFC) Stack", Industrial & Engineering Chemistry Research, 52 (22), (2013) 7104–7115, Impact factor-2.587, Google Scholar citation-0, Scopus-0.
- 16. Krishanu Chatterjee, Palash Dhara, Saibal Ganguly, Kajari Kargupta and Dipali Banerjee, "Morphology dependent ammonia sensing with 5-sulfosalicylic acid doped nanostructured polyaniline synthesized by several routes", Sensors and Actuators B, 181 (2013) 544–550, Impact factor-4.097, Google Scholar citation-9, Scopus-6.
- 17. S. Ganguly, S. Das, K. Kargupta and D. Banerjee, "Optimization of Performance of Phosphoric Acid Fuel Cell (PAFC) Stack using Reduced Order Model with Integrated Space Marching and Electrolyte Concentration Inferencing" Computer-Aided Chemical Engineering, 31 Part B (2012) 1010-1014, Google Scholar citation-0, Scopus-0.
- 18. Kajari Kargupta, Swati Saha, Dipali Banerjee, Mrinal Seal and Saibal Ganguly, "Performance Enhancement of Phosphoric acid Fuel cell using Phosphosilicate Gel based Electrolyte", Journal of fuel chemistry and Technology, 40 (2012) 707-713, Impact factor-1.089, Google Scholar citation-6, Scopus-4.
- Krishanu Chatterjee, Saibal Ganguly, Kajari Kargupta and Dipali Banerjee, "Bismuth Nitrate Doped Polyaniline–Characterization and Properties for Thermoelectric Application", Synthetic Metals, 161 (2011) 275–279, Impact factor- 1.289, Google Scholar citation-15, Scopus-10.
- **20.** Amit Das, Farook Rahaman, **B. K. Guha**, Saibal Ray. "*Relativistic compact stars in f(T) gravity admitting conformal motion*." Astrophysics and Space Science. Vol: 358, (2015). Pp :36. Impact Factor- 2.401

- 21. Kalyan Sundar Pal, Sandip Bysakh, Awadhesh Kumar Mallik, Nandadulal Dandapat, Someswar Datta and Bichitra K. Guha, "Influence of growth conditions on microstructure and defects in diamond coatings grown by microwave plasma enhanced CVD". Bulletin of Materials Science, Vol. 38 (2015) pp: 1-8. Impact Factor- 0.870
- **22.** Nandadulal Dandapat, Sumana Ghosh, Kalyan S. Pal, Someswar data, **Bichitra K. Guha**, "*Thermal Cycling behavior of Alumina -Graphite brazed Joints in electron tube applications*"

Transactions of Nonferrous Metal Society of China, Vol: 24 (2014), pp 1666-73, **Impact factor:**1.178

- 23. Awadhesh K. Mallik, Sandip Bysakh, Kalyan S. Pal, Nandadulal Dandapat, Bichitra K. Guha, Someswar data, Debabrata Basu. "Synthesis and characterization of freestanding diamond coating". Indian Journal of Engineering and Materials Sciences, Vol. 20 (2013) pp 522-532. Impact factor: 0.413, Citation:3
- 24. Awadhesh K. Mallik, Sandip Bysakh, Kalyan S. Pal, Nandadulal Dandapat, Bichitra K. Guha, Someswar Datta, Debabrata Basu. "Large Area Deposition of Polycrystalline Diamond Coatings by Microwave Plasma CVD" Transactions of Indian Ceramic Society, Vol. 72(4) (2013), pp:225-232.
 Impact Factor-0.348. Citation:5
- 25. Awadesh K Mallik, Kakyan S Pal, Nandadulal Dandapat, Bichitra K. Guha, Someswar Datta, Debabrata Basu, "Influence of the microwave plasma CVD reactor parameters on substrate thermal anagement for growing large area diamond coatings inside a 915 MHz and moderately low power unit." Diamonds and Related materials, Vol:30,(2012) pp 53-61. Impact factor: 1.919; Citation:11
- **26.** Subrata Mitra and **Samar Jana**, "Intense orange emission in Pr^{3+} doped lead phosphate glass", **Journal of Physics and Chemistry of Solids, Volume 85, (2015), Page 245-253,** Impact Factor: 1.853, Citations: not yet
- 27. Subrata Mitra and Samar Jana, "Properties of the energy bands, Judd-Ofelt parameters and the fluorescence of neodymium chloride (NdCl₃) in methanol, iso-propanol and butanol solvents" Journal of Fluorescence, Volume 25, Issue 3, (2015), Page 541-549, (Springer), Impact Factor: 1.927, Citations: not yet
- 28. Subrata Mitra and Samar Jana, "Absorption and luminescence of PrCl₃ in methanol, iso-propanol and butanol solvents", Optik International Journal for Light and Electron Optics, Volume 126, (2015), Page 4037-4041, Impact Factor: 0.677, Citations: not yet
- 29. Samar Jana and Subrata Mitra, "Characteristics of the energy bands and the spectroscopic parameters of Pr³⁺ ions in PrCl₃ mixed methanol, iso-propanol and butanol solutions", Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, Volume 83, (2011), Page 52-55, Impact Factor: 2.353, Citations: 5

- **30.** Navonil Bose, **Sampad Mukherjee** and **Mousumi Basu**, "Parabolic and Semi-parabolic Pulse Dynamics in Optical Fibers", Optical Engineering, Vol. 54, No. 1, 2015, pp. 016108-(1-10), Impact Factor: 0.926 (5 year IF), Citations: Not yet.
- **31.** Debasruti Chowdhury, Dipankar Ghosh and **Mousumi Basu**, "Silica Based Highly Nonlinear fibers to Generate Parabolic self-similar pulses", Optical and Quantum Electronics, Vol. 47, No. 8, 2015, pp. 2615-2635, Impact Factor: 0.987 (5 year IF), Citations: Not yet.
- **32.** Navonil Bose, G S Taki, **Mousumi Basu** and **Sampad Mukherjee**, "GeO₂ nanorods: synthesis, structural and photoluminescence properties", Materials Research Express, Vol. 1, No. 4, 2014, pp. 045013,), Impact Factor: the journal will receive its first *Impact Factor* in 2017, Citations: 1.
- **33.** Debasruti Chowdhury, Dipankar Ghosh and **Mousumi Basu**, "Designing a highly nonlinear normally dispersive optical fiber for efficient parabolic pulse generation", Journal of Physical Sciences, Vol. 18, 2014, pp. 19-22,.
- 34. <u>Navonil Bose</u>, <u>Dipankar Ghosh</u>, <u>Sampad Mukherjee</u> and <u>Mousumi Basu</u>, "Nonlinear pulse reshaping in a designed erbium-doped fiber amplifier with a multicladded index profile", <u>Optical Engineering</u>, Vol. 52, No. 8, 2013, pp. 086104-(1-9), Impact Factor: 0.926 (5 year IF), Citations: 1.
- **35.** Navonil Bose, **Mousumi Basu** and **Sampad Mukherjee**, "Study of Optical Properties of GeO₂ nanocrystals as synthesized by Hydrothermal Technique", Material Research Bulletin, Vol. 47, No. 6, 2012, pp.1368-1373, Impact Factor: 2.368 (5 year IF), Citations: 14.
- **36.** Mrinal Seal, **Sampad Mukherjee**, "Approach for Selection of a Synthesis Procedure of GeO2 Ultrasmall Nano Particles and Its Characterization", International Journal of Physics, 3, 2015, 133-138.
- **37.** EpsitaKar, Navonil Bose, Sukhen Das, Nillohit Mukherjee, **Sampad Mukherjee**, "Enhancement of electroactive^β phase crystallization and dielectric constant of PVDF by incorporating GeO2 and SiO2 nanoparticles", Phy Chem. Chem. Phy, 17, 2015, 22784-22798.
- **38.** Sanchyita Nag, Anirban Roychowdhury, Dipankar Das, **Sampad Mukherjee**, "Synthesis of a-Fe2O3-functionalised graphene oxide nanocomposite by a facile low temperature method and study of its magnetic and hyperfine properties" Materials Research Bulletin 74 (2016) 109–116.
- **39.** Biplab Dutta, Epsita Kar, Navonil Bose, **Sampad Mukherjee**," Significant Enhancement of the Electroactive β Phase of PVDF by Incorporating Hydrothermally Synthesized Copper Oxide Nanoparticles", RSC Advances, **5** (2015), 105422-105434.

- 40. S. Biswas, R. Palit, A. Navin, M. Rejmund, Abhijit Bisoi, M. Saha Sarkar, S. Sarkar, S. Bhattacharyya, D. C. Biswas, M. Caamaño, M. P. Carpenter, D. Choudhury, E. Clément, L. S. Danu, O. Delaune, F. Farget, G. de France, S. S. Hota, B. Jacquot, A. Lemasson, S. Mukhopadhyay, V. Nanal, R. G. Pillay, S. Saha, J. Sethi, Purnima Singh, P. C. Srivastava, and S. K. Tandel, "Structure of ¹³²₅₂Te₈₀ The two-particle and two-hole spectrum of ¹³²₅₀Sn₈₂" Phys. Rev. C, Vol 93, year 2016, pp 034324, Impact Factor: 3.733, Citations: 0
- 41. S. Rajbanshi, S. Roy, Somnath Nag, Abhijit Bisoi, S. Saha, J. Sethi, T. Bhattacharjee, S. Bhattacharyya, S. Chattopadhyay, G. Gangopadhyay, G. Mukherjee, R. Palit, R. Raut, M. Saha Sarkar, A.K. Singh, T. Trivedi, A. Goswami, "Antimagnetic rotation and sudden change of electric quadrupole transition strength in ¹⁴³Eu" Physics Letters B, Vol 748, year 2015 pp 387, Impact Factor: 6.131, Citations:0
- **42.** M. Roy Basu, S. Ray, **Abhijit Bisoi** and M. Saha Sarkar, "Characterisation of a composite LEPS" *JINST*, *Vol* 10, year 2015, pp T07002, **Impact Factor: 1.399, Citations:0**
- **43.** Kamales Kar and **S. Sarkar** "Study of isospin nonconservation in the framework of spectral distribution theory" J. Phys. G: Nucl. Part. Phys. Vol 42, year 2015, pp 055110, **Impact Factor: 2.78, Citations:0**
- 44. Abhijit Bisoi, M. Saha Sarkar, S. Sarkar, S. Ray, D. Pramanik, R. Kshetri, S. Nag, K. Selvakumar, P. Singh, A. Goswami, S. Saha, J. Sethi, T. Trivedi, B. S. Naidu, R. Donthi, V. Nanal and R. Palit, "High spin spectroscopy in ³⁴Cl" Phys. Rev. C, Vol 89, year 2014, pp 024303, Impact Factor: 3.733, Citations: 5
- 45. Abhijit Bisoi, M. Saha Sarkar, S. Sarkar, S. Ray, D. Pramanik, R. Kshetri, S. Nag, K. Selvakumar, P. Singh, A. Goswami, S. Saha, J. Sethi, T. Trivedi, B. S. Naidu, R. Donthi, V. Nanal and R. Palit, "Collective excitations in ³³S" Phys. Rev. C, Vol 90, year 2014, pp 024328, Impact Factor: 3.733, Citations: 1
- **46.** S. Rajbanshi, **Abhijt Bisoi**, S. Nag, S. Saha, J. Sethi, T. Trivedi, T. Bhattacharjee, S. Bhattacharyya, S. Chattopadhyay, G. Gangopadhyay, G. Mukherjee, R. Palit, R. Raut, M. Saha Sarkar, A. K. Singh and A. Goswami "Shape coexistence in the near-spherical ¹⁴²Sm nucleus" Phys. Rev. C, Vol 89, year 2014, pp 014315,**Impact Factor: 3.733, Citations: 1**
- **47.** S. Rajbanshi, **Abhijt Bisoi**, S. Nag, S. Saha, J. Sethi, T. Bhattacharjee, S. Bhattacharyya, S. Chattopadhyay, G. Gangopadhyay, G. Mukherjee, R. Palit, R. Raut, M. Saha Sarkar, A. K. Singh, T. Trivedi and A. Goswami, "Multiple magnetic rotational bands based on proton alignment in ¹⁴³Eu" Phys. Rev. C, Vol 90, year 2014, pp 024318, **Impact Factor: 3.733, Citations: 4**
- 48. Abhijit Bisoi, M. Saha Sarkar, S. Sarkar, S. Ray, M. Roy Basu, D. Kanjilal, S. Nag, K. Selvakumar, A. Goswami, N. Madhavan, S. Muralithar and R. K. Bhowmik, "Superdeformation and α-cluster structure in ³⁵Cl" Phys. Rev. C, Vol 88, year 2013, pp 034303, Impact Factor: 3.733, Citations: 7
- 49. S. Nag, P. Singh, K. Selvakumar, A. K. Singh, Abhijit Bisoi, A. Goswami, S. Bhattacharya, Surender Kumar, Kuljeet Singh, J. Sethi, S. Saha, T. Trivedi, S.V. Jadhav, R. Donthi, B.S. Naidu, and R. Palit "Non-collective states in ¹²²Te" Eur. Phys. J. A, Vol 49, year 2013, pp 145, Impact Factor: 2.736, Citations: 2
- **50.** Shiladitya Acharya and **Krishnendu Mukherjee**, "Heat transport in a three dimensional slab geometry and the temperature profile of Ingen-Hausz's experiment", International Journal of Modern Physics, B27, (2013) 1350057; Errata: B27, (2013) 1392003; Impact factor-0.937.
- 51. Madhab De and Debasis Ray, "Influence of dense quantum plasmas on fine-structure splitting of Lyman doublets of hydrogenic systems" Physics of Plasmas, vol.22, (2015), 054503, Journal Impact Factor: 2.142, Citation: 01

- **52.** Avijit Ghosh and **Debasis Ray**, "Non-resonant elastic scattering of low-energy photons by atomic sodium confined in quantum plasmas", **Physics of Plasmas**, vol.22, (2015) 032707, Journal Impact Factor: 2.142, Citation: 02
- 53. Joyee Basu and Debasis Ray, "Possibility of giant enhancement of low-frequency non-resonant Rayleigh scattering by atomic systems within dense plasmas", Physics of Plasmas, vol.21, (2014), 032709. Journal Impact Factor: 2.142, Citation: 00
- 54. Joyee Basu and Debasis Ray, "Suppression of fine-structure splitting and oscillator strength of sodium D-line in a Debye plasma", Physics of Plasmas, vol.21, (2014), 013301, Journal Impact Factor: 2.142, Citation: 01
- **55.** Joyee Basu and Debasis Ray, "*Dynamic polarizability of an atomic ion within a dense plasma*", **Physical Review E, vol.83, (2011), 016407,** Journal Impact Factor: 2.255, Citation: 13
- **56.** J. Das, S. Pradhan, **S.M. Hossain**, Electrical transport mechanism in Au-modified nano porous silicon, Journal of Nanomaterials and Molecular Nanotechnology (Accepted for publication, 2016) JIF: 1.06
- **57.** Avra Kundu, Sonali Das, **S. M. Hossain**, Swapan K. Datta, HiranmaySaha, Tapered silicon nanopillars for enhanced performance thin film solar cells, Energy Procedia, Volume 54, pp 389-399, 2014. JIF: 0.786
- **58.** S. Pradhan, **S.M. Hossain**, J. Das, Selective manhole methane sensing by Pd-modified nanostructured porous silicon, IJMSET 1(6) (2014) 10-14, JIF: 3.094
- **59.** M. Ray, A. Jana, U. Ghanta, N. R. Bandyopadhyay, **S. M. Hossain**, "Photoluminescence from Oxidized Macroporous Silicon: Nano-Ripples and Strained Silicon Nanostructures", IEEE Transactions on Device and Materials Reliability, Vol. 13, Issue 1, page 87-92, (2012). JIF: 1.89
- **60.** Sadhan Chandra Das, **Abhijit Majumdar**, Subroto Mukherjee, Sumant Katiyal, "Development of power supply for atmospheric pressure plasma jet at room temperature for bio-medical applications, T. Shripathi, IEEE Explore (Accepted), 2015. Impact factor: 4.9 Citation: 0
- **61.** David Necas, J. Vodak, I. Ohlídal, M. Ohlídal, Abhijit Majumdar, L. Zajíčková, "Simultaneous determination of dispersion model parameters and local thickness of thin films by imaging spectro-photometry" Applied Surface Science, 350, (2015) 149-155. Impact factor: 2.711 Citation: 3
- **62. Abhijit Majumdar**, Sadhan Chandra Das, Vitaslav Stranak, Rainer Hippler, "Electronic bond structure of carbon nitride thin film deposited by HiPIMS and dc magnetron plasma"- Journal of Coating Science and Technology 2, (2015) 28-37. Impact factor: N/A Citation: 3
- **63.** Sadhan C. Das, **Abhijit Majumdar**, Sumant Katiyal, T. Shripathi, R. Hippler, "Development of fast heating electron beam annealing setup for ultra high vacuum chamber", Rev. Sci. Instrument 85, (2014) 025107. Impact factor: 1.7 Citation: 3
- **64.** Abhijit Majumdar, S. C. Das, J. Heinecke, R. Hippler, "Structural difference in hydrogenated carbon nitride and carbon nitride: Shake up satellites and fluorescence phenomena", Surface Science 609, (2013) 53. Impact factor: 1.925 Citation: 4

- **65.** Abhijit Majumdar, S. Mukherjee, R. Hippler, "Role of nitrogen in optical and electrical band gap of hydrogenated/hydrogen free carbon nitride", Thin solid film 527, (2013) 151. Impact factor: 1.8 Citation: 4
- **66.** Abhijit Majumdar, S C Das, R. Hippler, "Role of nitrogen in evaluation of sp₂/sp₃ and optical band gap of hydrogenated carbon nitride: Raman spectroscopy", Vibrational Spectroscopy 66, (2013) 63-68. Impact factor: 2.03 Citation: 7
- **67.** Y. Pascal-Levy, E. Shifman, **M. Pal-Chowdhury**, I. Kalifa, T. Rabkin, O. Shtempluck, A. Razin, V. Kochetkov, and Y. E. Yaish, "Water-assisted mobile charge induced screening and origin of hysteresis in carbon nanotubefield-effect transistors", Physical Review B, 86, 2012, 115444, Impact factor: 3.736, Citations: 11
- **68.** Y. Pascal-Levy, E. Shifman, **M. Pal-Chowdhury**, E. M. Hajaj, O. Shtempluck, A. Razin, V. Kochetkov, and Y. E. Yaish, "Gate-Induced Modification of Water Adsorption on Dielectrics Probed by EFM and Carbon Nanotube FETs", Chem Phys Chem, 13, 2012, 4202, Impact factor: 3.419, Citations: 01
- **69.** Y Pascal-Levy, E Shifman, I Sivan, I Kalifa, **M Pal-Chowdhury**, O Shtempluck, A Razin, V Kochetkov, YE Yaish, "Water assisted gate induced temporal surface charge distribution probed by electrostatic force microscopy", Journal of Applied Physics, 112, 2012, 084329, Impact factor: 2.183, Citations: 04
- **70. Dwipesh Majumder** and Sudhansu S. Mandal, "*Neutral collective modes in spin-polarized fractional quantum Hall states at filling factors 1/3*, 2/5, 37, and 4/9", **Physical Review B** 90, (2014), 155310, Impact Factor 3.736, Citation: 02
- **71. Mojammel H. Mondal** and M. Mukherjee, "Study of density-dependent swelling of ultrathin water soluble polymer films", **J Polym Res** 21, (2014), 343, Impact factor 1.920, Citation: 1
- **72. Mojammel H. Mondal** and M. Mukherjee, "Effect of thermal modification on swelling dynamics of ultrathin polymer films", **Polymer** 53, (2012), 5170-5177, Impact factor 3.91, Citation: 4

(ii) <u>Conference Proceedings</u>:

- 1. Mousumi Mitra, **Dipali Banerjee**, Kajari Kargupta and Saibal Ganguly, "Preparation and thermoelectric properties of reduced graphene oxide-polypyrrole composite" **International Conference on Organic and Hybrid Thermoelectrics (ICOT 2016), Kyoto, Japan, 18-20th January 2016.**
- Mukulika Jana Chatterjee, Krishanu Chatterjee and Dipali Banerjee, "Thermoelectric performance of structurally ordered polyaniline-carbon nanotube composite" International Conference on Organic and Hybrid Thermoelectrics (ICOT 2016), Kyoto, Japan, 18-20th January 2016.
- 3. Mousumi Mitra, Dipali Banerjee, Kajari Kargupta and Saibal Ganguly, "Temperature dependent thermoelectric property of reduced graphene oxide-polyaniline composite" International Conference

on Condensed matter & Applied Physics (ICC-2015), Veterinary University Auditorium, Bikaner Rajasthan, 30-31st October 2015. (To be published in AIP Conference Proceedings).

- 4. Mukulika Jana Chatterjee, Dipali Banerjee, Amrita Ghosh and Anup Mondal, "Dopant dependent photocatalytic activity of polyaniline towards the degradation of Rose Bengal dye" International Conference on Condensed matter & Applied Physics (ICC- 2015), Veterinary University Auditorium, Bikaner Rajasthan, 30-31st October 2015. (To be published in AIP Conference Proceedings).
- Chiranjit Kulsi, Kajari Kargupta and Dipali Banerjee, "Process Dependent Thermoelectric Properties of EDTA Assisted Bismuth Telluride" 2nd International Conference on Emerging Technologies: Micro to Nano 2015 (ETMN 2015), Manipal University, Jaipur, Rajasthan 24-25th October 2015. (To be published in AIP Conference Proceedings).
- 6. Mousumi Mitra, Kajari Kargupta, Saibal Ganguly, and Dipali Banerjee, "Improved photoluminescence property of CTAB assisted polyaniline-AlZnO nanocomposite" AIP Conference Proceedings, 1665, 2015, 050149, doi: 10.1063/1.4917790.
- Krishanu Chatterjee, Mousumi Mitra, Dipali Banerjee, Kajari Kargupta and Saibal Ganguly, "Synthesis of nanostructures of polyaniline doped with inorganic dopant for sensing ammonia". International Conference on Advanced Materials and Energy Technology (ICAMET) IIEST, Shibpur Howrah, 17-19th December 2014.
- 8. Subhanwita Saha, Sabbir Ahmed, Saibal Ganguly, Dipali Banerjee and Kajari Kargupta "Synthesis and Characterization of Electrocatalytically Active Graphene-Cobalt Nanocatalyst for Hydrogen Generation" International Conference on Advanced Materials and Energy Technology (ICAMET) IIEST, Shibpur Howrah, 17-1^{9th} December, 2014
- **9.** Mousumi Mitra, Krishanu Chatterjee, Kajari Kargupta, Saibal Ganguly and Dipali Banerjee, "Lowdimensional novel nanocomposite of polyaniline-graphene and its sensing application." **International Conference on Advancements in Polymeric Materials** CIPET-Bhubaneswar, 14-16th February, 2014.
- 10. Shubhanwita Saha, Ananta Kr Sarkar, Mousumi Mitra, Dipali Banerjee, Saibal Ganguly and Kajari Kargupta, "Hydrogen storage material: Synthesis and characterization of graphene/PANI nanocomposite, International Conference on Advancements in Polymeric Materials CIPET-Bhubaneswar, 14-16th February, 2014.
- Dipali Banerjee, Mousumi Mitra, Krishanu Chatterjee, Kajari Kargupta, Saibal Ganguly, "Synthesis and characterization of reduced graphene oxide via organic and inorganic reducing agents – a comparison", International Conference on Diamond and Carbon Materials Riva del Garda, Italy 2-5th September, 2013. (accepted for poster presentation)
- Kajari Kargupta, Krishanu Chatterjee, Saibal Ganguly, Dipali Banerjee, "Ammonia Sensing of Nanostructured Polyaniline with Organic and Inorganic dopants.". Nanomaterials: Application & Properties '2012, Ukraine, 17-22th September, 2012.
- Dipali Banerjee, Palash Dhara, Krishanu Chatterjee, Kajari Kargupta, Saibal Ganguly, "Thermoelectric Characterization of Nanostructures of Bismuth Prepared by Solvothermal Approach." Nanomaterials: Application & Properties '2012, Ukraine, 17-22th September, 2012.
- 14. Krishanu Chatterjee, Saibal Ganguly, Kajari Kargupta, Jayita Pal, Dipali Banerjee, "Investigation of thermoelectric property of polyaniline nanorods doped with organic andinorganic dopants.". ICPEAM, Malaysia, 12-14th June, 2012.
- 15. Ratul Das, Sreeya Kundu, Priyanka Bose, K. Kargupta, Saptarshi Majumder, Dipali Banerjee, Saibal Ganguly, "Cyclic Voltammetry Driven Controlled Drug Release Through Conducting Polymer Membrane," ICPEAM2012-BIO_112, Malaysia, 12-14th, June, 2012.

- **16.** Mousumi Mitra, Kajari Kargupta, Saibal Ganguly, Dipali Banerjee, "Improved Photoluminescence Property of CTAB Assisted Polyaniline-AlZnO nanocomposite" DAE-SSPS 2014, 16th-20th December, 2014 (accepted for poster presentation).
- 17. Mousumi Mitra, Krishanu Chatterjee, Dipali Banerjee, "Metal-free synthesis of graphene using formic acid and its conductivity studies" UGC sponsored National Seminar On Advancement in Modern Physics, Ramkrishna Mission Narendrapur, 23-24th August, 2013.
- 18. Chiranjit Kulsi, Mousumi Mitra, Dipali Banerjee, "Synthesis of nanostructured bismuth and its characterization" UGC sponsored National Seminar On Advancement in Modern Physics, Ramkrishna Mission Narendrapur, 23-24th August, 2013.
- **19.** Krishanu Chatterjee, Saibal Ganguly, Kajari Kargupta and Dipali Banerjee, "Synthesis and Characterization of Nanostructured Bismuth Telluride, Polyaniline and their Composite for Device Application" MRSI-YSC 2013.
- **20.** M. Mitra, K. Chatterjee, D. Banerjee, K. Kargupta, S. Ganguly, "Ammonia sensing performance of Polyaniline-graphene nanocomposite" Third National Seminar on Condensed Matter Physics including Laser Application, Burdwan University, 5-7th march, 2013.
- **21.** K. Chatterjee, M. Mitra, M, Rahman, D. Banerjee, K. Kargupta, S. Ganguly, "Enhanced electrical conductivity of novel cable-like polyaniline-bismuth telluride nanocomposite", Third National Seminar on Condensed Matter Physics including Laser Application, Burdwan University, 5-7th march, 2013 (awarded best poster presentation).
- **22.** Palash Dhara, Krishanu Chatterjee, Kajari Kargupta, Dipali Banerjee, "Bismuth Nanoparticle Synthesis and Characterization." First National Conference on Recent Trend in Condense Matter Physics Incuding Laser Application, Burdwan University, 6th March, 2012.
- **23.** Subrata Mitra and **Samar Jana**, "*Energy bands, oscillator strengths and fluorescence of PrCl₃ in methanol*", **5th International Conference on Luminescence and its Applications** (ICLA-2015), PES University, Bangalore, India, (9-12 February, 2015).
- **24. Samar Jana** and Subrata Mitra, "*Optical absorption and emission properties of* Pr^{3+} -*doped* 0.55PbO-0.45P₂O₅ glass", **16th International Conference on Luminescence** (ICL'11), University of Michigan, Ann Arbor, USA, Page 48 (WP234), (26 June - 1 July, 2011).
- 25. Debasruti Chowdhury, Dipankar Ghosh and Mousumi Basu, "An analytical perturbation approach to analyze the generation of parabolic pulses in a dispersion decreasing fiber amplifier in normal dispersion regime," ICOP-2015, XXXIX Conference on Optics and Photonics, Nanotechnology campus, University of Calcutta, India, isbn: 978-93-80813-31-8, Paper No.: ICOP2015 P-331, Page No. 107, 20th -22nd February, 2015.
- **26.** Debasruti Chowdhury, Navonil Bose, Dipankar Ghosh and **Mousumi Basu**, "Generation of triangular optical pulses through a normally dispersive highly nonlinear fiber," Optics-2015, 3rd International Conference and Exhibition on Lasers, Optics and Photonics, Valencia, Spain, 1st 3rd September, 2015.
- 27. Debasruti Chowdhury, Dipankar Ghosh and Mousumi Basu, "Efficient Parabolic Similariton Generation by Highly Nonlinear Silica Based Dispersion Decreasing Fiber", National Conference on

Emerging Technology and Applied Sciences-2014 (NCETAS 2014), ISSN (Online): 2319-8753, ISSN (Print): 2347-6710, Paper No.: ID_16, Page No. 81-87, February 15-16, 2014.

- **28.** Debasruti Chowdhury, **Mousumi Basu** and Dipankar Ghosh, "Propagation of Parabolic Pulse through a Dispersion Decreasing Fiber with High Nonlinearity," ICCCM 2014, International Conference on Computing, Communication & Manufacturing, ISSN: 2214-0344, Paper No.: Comm. 16, Page No. 218-221, 22nd 23nd December, 2014.
- **29.** Debasruti Chowdhury, Navonil Bose, **Mousumi Basu, Sampad Mukherjee** and Dipankar Ghosh, "Minimization of the Effect of Third Order Dispersion in Parabolic Pulse Generation by A Normal Dispersion Fiber Amplifier", Recent Developments in Electrical, Electronics & Engineering Physics (RDE3P-2013), ISBN: 978-81-8424-877-7, Paper no: RDE3P-PHY-01, Page no: 185-189, October 26-27, 2013.
- **30.** Navonil Bose, **Mousumi Basu**, **Sampad Mukherjee** and G.S.Taki, "Synthesis and Characterization of GeO₂ Nanorods", Recent Developments in Electrical, Electronics & Engineering Physics (RDE3P-2013), ISBN: 978-81-8424-877-7, Page no: 205-207, October 26-27, 2013.
- 31. Debasruti Chowdhury, Mousumi Basu and Dipankar Ghosh, "Efficient Parabolic Similariton Generation by Highly Nonlinear Silica Based Fiber", International Conference on Recent Trends in Science & Technology (ICRTST 2013), ISBN: 978-93-603-0844-9, Paper No.: D.Chowdhury_117, Page No. 129-135, December 27-29, 2013.
- 32. Debasruti Chowdhury, Navonil Bose, Mousumi Basu, Sampad Mukherjee and Dipankar Ghosh, "Efficient Parabolic Similariton Generation by Third Order Dispersion Compensation", 5th International Conference on Computers and Devices For Communication (CODEC 2012), ISBN: 978-14-6732-619-3 Paper No.: OLT-20-9403, Page no: OLT-17, December 17-19, 2012. (DOI:<u>10.1109/CODEC.2012.6509309</u>).
- **33.** Epsita Kar, **Sampad Mukherjee**, "Preparation and Characterization of GeO₂ doped PVDF films", *Proc. of RDE3P-2013*, 2013.
- **34.** Sanchayita. Nag, **Sampad Mukherjee**, "pH dependent study of structural and Optical properties of Fe₂O₃ nanocrystals",CMDAYS-14
- **35.** Navonil Bose, **M. Basu** and **Sampad Mukherjee**, "Synthesis and Characterization of GeO₂ Nanocrystals", Proc. Of International Conference on Specialty Glass and Optical Fiber:Materials, Technology & Devices (ICGF - 2011), (2011) Page-217
- **36.** Navonil Bose, D. Ghosh, **S. Mukherjee** and **M. Basu**, "Studies on A Multicladded Erbium Doped Non Zero Dispersion Shifted Fiber to Achieve A Flattened Gain Spectrum", *Proc. Of International Conference on LASER, Materials Science and Communication (ICLMSC-2011)*, Manuscript Id-C13

- 37. M. Saha Sarkar, S. Sarkar "¹³⁶Sn and three body forces" Proceedings of the Conference on 75 years of Nuclear Fission: Present Status and Future Perspective (Fission 75) Bhabha Atomic Research Centre, Mumbai 400 085, India, 8–10 May 2014, Editors D C Biswas, K. Mahata and V.M. Datar, Pramana Special Issue 19July 2015.
- **38.** M. Saha Sarkar, **Abhijit Bisoi**, S. Ray, R. Kshetri and **S. Sarkar**, "Understanding Nuclei in the upper *sd*-shell" AIP Conf. Proc. Vol 1609, year 2014, pp 95.
- **39.** Abhijit Bisoi, Sudatta Ray, Maitreyee Saha Sarkar, S. Sarkar, "Superdeformation and alpha-cluster structure in sd-shell nuclei" to be published in the Proceedings of CIPSA 2013, The 9th International Conference in Subatomic Physics and Applications held in Constantine-1 University, Algeria from September 30th to October 2nd 2013.
- **40.** A Saha, T Bhattacharjee, D Banerjee, S R Banerjee, S Rajbanshi, Abhijit Bisoi, Soumik Bhattacharya, T Roy, S Das Gupta, A Chakraborty, S Bhattacharyya, D Mondal, B Dey, D Pandit, R Palit, R P Singh, S K Das, M Saha Sarkar, A Goswami, S K Basu, S Saha, S Biswas, J Sethi, D Curien, J Dudek, G Duchene, G d Angelis "Spectroscopy of N = 90¹⁶⁰Yb" Proc. Int. DAE-BRNS Symp. Nucl. Phys. (India), Vol **58**, year 2013, pp 178.
- **41.** *Abhijit Bisoi*, *Sudatta Ray*, *Dibyadyuti Pramanik*, *Riitesh Kshetri*, *S Nag*, *K Selvakumar*, *P Singh*, *Asimananda Goswami*, *S Saha*, *J Sethi*, *T Trivedi*, *B.S. Naidu*, *R Donthi*, *V Nanal*, *R Palit*, *S*. *Sarkar*, *Maitreyee Saha Sarkar* "High spin states in ³³S" Proc. Int. DAE-BRNS Symp. Nucl. Phys. (India), Vol **58**, year 2013, pp 224.
- **42.** D. Kanjilal, Abhijit Bisoi, M. Das, C.C. Dey, S. Ray, R. Palit, S. Saha, J. Sethi, T. Trivedi, S. Nag, S. Bhattacharya, S. Saha "High spin states in ²⁰⁵At" Proc. Int. DAE-BRNS Symp. Nucl. Phys. (India), Vol **58**, year 2013, pp 262.
- **43.** *Abhijit Bisoi*, *Maitreyee Saha Sarkar*, *C. A. Desai*, *L.C. Tribedi*, *H.S. Jung*, *K Setoodehnia*, *S Lyons*, *J Gorres, Ed Stech, D Robertson, M Wiescher* "Characterization of ²²Ne implanted target by ²²Ne(p,γ)²³Na resonance reaction" Proc. Int. DAE-BRNS Symp. Nucl. Phys. (India), Vol **58**, year 2013, pp 934.
- **44.** *Anirudh Chandra, Dibyadyuti Pramanik, Abhijit Bisoi* "Neutron detection by Pulse Shape Discrimination and Time of Flight techniques" Proc. Int. DAE-BRNS Symp. Nucl. Phys. (India), Vol **58**, year 2013, pp 936.
- **45.** *Abhijit Bisoi*, *L.C. Tribedi*, *D Misra*,*S Biswas*,*K.V. Thulasi Ram*,*M.V. Rundhe*,*KV Anoop*,*Vandana Nanal*,*Maitreyee Saha Sarkar* "Bulk characterization of ¹⁴N implanted target using Resonance reaction and SIMS measurements" Proc. Int. DAE-BRNS Symp. Nucl. Phys. (India), Vol **58**, year 2013, pp 994.
- **46.** *Abhijit Bisoi*, *Dibyadyuti Pramanik,B Dey ,Maitreyee Saha Sarkar* "Measurement of Intrinsic Neutron Detection Efficiency of a Liquid Scintillator using Digital Data Acquisition System" Proc. Int. DAE-BRNS Symp. Nucl. Phys. (India), vol **58**, year 2013, pp 996.
- **47.** Maitreyee Saha Sarkar, **S. Sarkar** "Shell Evolution in Neutron Rich Nuclei" to be published in the Proceedings of CIPSA 2013, The 9th International Conference in Subatomic Physics and Applications held in Constantine-1 University, Algeria from September 30th to October 2nd 2013.

- **48.** Maitreyee Saha Sarkar, **S. Sarkar** "Pairing and shell evolution in neutron rich nuclei" Fission and Properties of Neutron-Rich.Nuclei, Proceedings of the Fifth International Conference: Sanibel Island, USA 4 -10 November 2012, Editors: J H Hamilton, A V Ramayya, World Scientific, (2013), Pg. 498.
- **49.** *Abhijit Bisoi, S. Sarkar, M Saha Sarkar* "Low energy cluster states in ³⁴S" Proc. DAE-BRNS Symp. Nucl. Phys. (India), Vol **60**, year 2015, pp 78.
- **50.** Sangeeta Das, Abhijit Bisoi, S. Sarkar, M. Saha Sarkar "Investigation of nuclear structure below the ¹³²Sn core" Proc. DAE-BRNS Symp. Nucl. Phys. (India), Vol **60**, year 2015, pp 108.
- 51. Abhijit Bisoi, Indrani Ray,L.C. Tribedi,D. Misra,S. Biswas,K. V. Thulasi Ram,M. V. Rundhe,Anoop KV,V Nanal,Sunil Ojha,P. Banerjee,S. Sarkar,M. Saha Sarkar "Lifetime of the 6792 keV state in ¹⁵O" Proc. DAE-BRNS Symp. Nucl. Phys. (India), Vol 60, year 2015, pp 892.
- **52.** S. Rajbanshi, Abhijit Bisoi, Somnath Nag,S. Saha,J. Sethi,T. Bhattacharjee,S. Bhattacharyya,S. Chattopadhyay,G. Gangopadhyay,G. Mukherjee,R. Palit,R. Raut,M. Saha Sarkar,A. K. Singh,T. Trivedi,A. Goswami "Effect of the clover geometry on the LINESHAPE analysis" Proc. DAE-BRNS Symp. Nucl. Phys. (India), Vol **59**, year 2014, pp 72.
- **53.** *Abhijit Bisoi, S. Sarkar, M Saha Sarkar* "Forbidden E1 transitions and isospin mixing in self-conjugate sd-shell nuclei Proc. DAE-BRNS Symp. Nucl. Phys. (India), vol **59**, year 2014, pp 102.
- **54.** *Abhijit Bisoi*, *M Saha Sarkar,S. Sarkar,S Biswas,R Palit* "Shell Model Calculations for ¹³²Te" Proc. DAE-BRNS Symp. Nucl. Phys. (India), Vol **59**, year 2014, pp 104.
- 55. S. Biswas, R. Palit, J. Sethi, S. Saha, Purnima Singh, D. Choudhury, V. Nanal, R. G. Pillay, M. Saha Sarkar, Abhijit Bisoi, S. Sarkar, L.S. Danu, S. Mukhopadhyay, D.C. Biswas, S.K. Tandel, S.S. Hota, M. Carpenter "Prompt-delayed coincidence for the investigation of high-spin states in ¹³²Te" Proc. DAE-BRNS Symp. Nucl. Phys. (India), Vol 59, year 2014, pp 128.
- 56. S. Rajbanshi, Abhijit Bisoi, Somnath Nag,S. Saha,J. Sethi,T. Bhattacharjee,S. Bhattacharyya,S. Chattopadhyay,G. Gangopadhyay,G. Mukherjee,R. Palit,R. Raut,M. Saha Sarkar,A. K. Singh,T. Trivedi,A. Goswami "Magnetic Rotational band. in ¹⁴¹Sm nucleus" Proc. DAE-BRNS Symp. Nucl. Phys. (India), Vol 59, year 2014, pp 166.
- **57.** A. Saha, T. Bhattacharjee, S. Rajbanshi, Abhijit Bisoi, D. Curien, J. Dudek, P. Petkov, D. Banerjee, S.R. Banerjee, Soumik Bhattacharya, S. Bhattacharyya, S. Biswas, A. Chakraborty, G.de Angelis, S.K. Das, S. Das Gupta, B. Dey, G. Duchene, A. Goswami, D. Mondal, D. Pandit, R. Palit, T. Roy, M. Saha Sarkar, S. Saha, R.P. Singh, J. Sethi "Evolution of collectivity in ¹⁶⁰Yb" Proc. DAE-BRNS Symp. Nucl. Phys. (India), Vol **59**, year 2014, pp 268.
- **58.** *A. Ray,A. K. Sikdar,B. Dey,D. Pandit,S. Bhattacharya,A. De, S. Paul, Srijit Bhattacharya, Abhijit Bisoi* "Indication of long fission lifetime of ²⁴²Pu at E_x=55 MeV" Proc. DAE-BRNS Symp. Nucl. Phys. (India), Vol **59**, year 2014, pp 486.
- **59.** Tuhin Malik, Krithika Raman, Rutuparna Rath, Rohan Biswas, Dibyadyuti Pramanik, Abhijit Bisoi, Shinjinee Dasgupta, Maitreyee Saha Sarkar "Gamma Spectroscopy with a digital oscilloscope" Proc. DAE-BRNS Symp. Nucl. Phys. (India), Vol **59**, year 2014, pp 984.

- **60.** *Uttiyoarnab Saha*, *Krithika Raman*, *Rutuparna Rath*, *Tuhin Malik*, *Abhijit Bisoi*, *Maitreyee Saha Sarkar* "Neutron Pulse-Shape Discrimination and Time -of - Flight Measurements with a Digital Oscilloscope" Proc. DAE-BRNS Symp. Nucl. Phys. (India), Vol **59**, year 2014, pp 986.
- **61.** U. Ghanta, P. Kar, S. Ghosh, A. Bose and **S. M. Hossain**, Effect of Photon Injection on the Lateral Metal-Insulator-Semiconductor Porous Silicon Tunnel Structure", National Conference on Emerging Trends in Engineering & Science 2015 (ETES-2015), 16-17 July, 2015, Asansol Engineering College, Asansol, Bardwan, India, Trak-4, pages 255-257 (ISBN: 978-93-84869-63-2).
- 62. U. Ghanta, M.Ray, N. R. Bandyopadhyay and S. M. Hossain; "Superliner Photo Response in Colloids of Silicon Quantum Dots", National Conference on Emerging Technology & Applied Sciencies, 2014 (NCETAS 2014), February 15-16, 2014, Modern Institute of Engineering & Technology, Bandel, Hooghly. International Journal of Innovative Research in Science, Engineering and Technology, Vol. 3, Special Issue 6, February 2014.
- **63.** U. Ghanta, M. Ray, N. R. Bandyopadhyay and **S. M. Hossain**; "Irreversible Quenching of Photoluminescence from Silicon Quantum Dots in Low Magnetic Field", 12th International Conference on FiberOptica and Photonics © OSA 2014 (Photonics-2014), Poster Sunday S5A.46, December 13-16, 2014, IIT, Kharagpur, India.
- **64.** Sonali Das, Avra Kundu, **S. M. Hossain**, Hiranmay Saha, Swapan K. Datta, "Effect of size on the scattering properties of silica nanoparticles", 2nd International Conference on Emerging Electronics (ICEE), IISc Bangalore, Bangalore, Dec 2014 (Available at IEEE Xplore).
- **65.** U Ghanta, M. Ray and **S. M. Hossain** ;"Photoluminescence Mechanism in Silicon Quantum Rods Studied by Time-Resolved Spectroscopy", International Conference on Recent Trends in Applied Physics & Material Science (RAM-2013), February 1-2, 2013, Govt. college of Engineering & Technology, Bikaner, Rajasthan (**Paper ID A-1918**). AIP Conference Proc. 1536, 277-278.
- **66.** U. Ghanta, M. Ray, N. R. Bandyopadhyay and **S. M. Hossain**; "Effect of UV Laser Radiation on the Photoluminescence Properties of SiliconQuantum Dot Colloids", National Conference on Nanomaterials Devices (NCONAD-2013), October 3-5, 2013, Department of Physics NIT Srinagar, Kashmir, Pages 61-63 (ISBN: 978-93-82880-70-7).
- **67.** Sonali Das, Prasenjit Dey, Avra Kundu, **S. M. Hossain**, Swapan K. Datta, HiranmaySaha, "Mixture of metal and dielectric nanoparticles for improved performance of silicon solar cell", 4th International Conference on Advances in Energy Research (ICAER), IIT Bombay, Mumbai, Dec 2013.
- **68.** Avra Kundu, Sonali Das, **S. M. Hossain**, Swapan K. Datta, Hiranmay Saha, "Tapered Silicon Nanopillars for enhanced performance thin film solar cells", 4th International Conference on Advances in Energy Research (ICAER), IIT Bombay, Mumbai, Dec 2013.

(iii) <u>Patent</u>

1. Patent filed: Indian Patent Application No: 3727/MUM/2015 Authors: **Abhijit Majumdar**, Akshay Vaid, Adam Sanghriyat, Chirayu Patel, Subroto Mukherjee. Year: 2015

- (i) Journals: 72
- (ii) Conference Proceedings: 68
- (iii) Patent : 1

Electronics & Telecomm. Engineering

<u>Journals</u>

<u>2016</u>

- Debasis Mitra, B. Ghosh, A. Sarkhel and Sekhar Ranjan Bhadra Chaudhuri, "Miniaturized Ring Slot Antenna with Enhanced Radiation Characteristics using Metamaterial", *IEEE Transactions on Antennas & Propagation.*, Vol. 64, no. 1, pp. 300-305, January, 2016. Impact Factor - 2.1, citation – 0
- J.Basu, C.RoyChaudhuri, "Attomolar Sensitivity of FET Biosensor Based on Smooth and Reliable Graphene Nanogrids", *IEEE Trans. on Electron Device Letters*, vol.37, no.4, 2016, pp.492-495, **Impact Factor:** 2.47, citations: 0
- 3. H.Ghosh, D.Kundu, C.RoyChaudhuri, "Design Issues for Performance Enhancement in Nanostructured Silicon Oxide Biosensors: Modeling the Frequency Response" accepted in *IEEE Transactions on Electron Devices*, 2016, **Impact Factor** :2.47, citations: 0
- 4. D.Mondal, R.Bose, C.RoyChaudhuri, "Real Time Monitoring of Wound Healing on Nanopatterned Substrates: Non-invasive Impedance Spectroscopy Technique", accepted in *IEEE Transactions on Nanotechnology*, 2016, **Impact Factor**: 1.8, citations: 0
- N.Samanta, C.RoyChaudhuri, "Nanocrystalline Silicon Oxide Impedance Immunosensors for Sub-femtomolar Mycotoxin Estimation in Corn Samples by Incremental Fuzzy Approach", *IEEE Sensors*, vol.16, pp.1079-1078, 2016, **Impact Factor** :1.52, citations: 0
- 6. K.K.Mistry, K.Layek, C.RoyChaudhuri, H.Saha, "Design and development of an amperometric immunosensor based on screen-printed electrodes", published online in *Analytical Methods* (Royal Society of Chemistry), 2016 (IF:1.8) No. of citations: 0
- K. Dutta, N. Banerjee, H. Mishra, P. Bhattacharyya, Performance Improvement of Pd/ZnO-NR/Si MIS Gas Sensor Device in Capacitive Mode: Correlation with Equivalent Circuit Elements, IEEE Transactions on Electron Devices (IEEE), (Accepted, in press, 2016) Impact Factor: 2.512, Citation: 0.

- D. Acharyya, P. Bhattacharyya, Alcohol Sensing Performance of ZnO Hexagonal Nanotubes at Low Temperatures: A Qualitative Understanding, Sensors and Actuators B (Elsevier), vol. 228, pp. 373-386 (2016), Impact Factor: 4.097, Citation: 0.
- B. Bhowmik, V. Manjuladevi, R. K. Gupta, P. Bhattacharyya, Highly Selective Low Temperature Acetone Sensor based on Hierarchical 3-D TiO₂ Nanoflowers, IEEE Sensors Journal (IEEE), (Accepted, in press, 2016), Impact Factor: 1.852, Citation: 0.
- S. Chatterjee, S. Maity, T. Acharya, "On optimal fuzzy c-means clustering for energy efficient cooperative spectrum sensing in cognitive radio networks", Elsevier Journal on Digital Signal Processing, vol. 49, 2016, pp. 104–115, Impact Factor: 1.256, citations: 0
- 11. Arihant Sethia, Ankita Pramanik, "Shorter Length Non-Binary LDPC Codes for Wireless Radio", Elsevier Perspectives in Science, pp. 1-5, 2016, Citations:0
- 12. Suranjana Banerjee, Aritra Acharyya, and Monojit Mitra," Large Signal and Noise Simulation of Heterojunction DDR IMPATT diodes based on Al_xGa_{1-x}As/GaAs at V-band", accepted for publication in *Journal of Semiconductors*, China, 2016.
- 13. Suranjana Banerjee, and Monojit Mitra, "Large signal and Noise Properties of Heterojuncton DDR IMPATTs Based on 3C-SiC/Si at mm-wave frequencies", accepted for publication in *International Journal of Microwave and Wireless Technologies*, 2016.
- 14. Saptarsi Ghosh, Syed M. Dinara, Mihir Mahata, Subhashis Das, Partha Mukhopadhyay, Sanjay Kumar Jana and Dhrubes Biswas, "On the different origins of electrical parameter degradation in reverse-bias stressed AlGaN/GaN HEMTs", Phys. Status Solidi A,1-5 (2016). Impact factor 1.61, citation 0

<u>2015</u>

- 15. TapanMondal and Santanu Das, "Design of a CPW-fed UWB printed antenna with dual notch band using mushroom structure," *International Journal of Microwave and Wireless Technologies*, pp.1-8, 2015. Impact Factor: 0.348, Citation 02
- 16. Swarup Das, Debasis Mitra, Sekhar Ranjan Bhadra Chaudhuri, "Design of UWB Planar Monopole Antennas with Etched Spiral Slot on the Patch for Multiple Band Notched Characteristics", *International Journal of Microwave Science and Technology*, HINDWAI Publishing, Special Issue - September, 2015. citation – 0
- 17. Tapas Mondal, S. Samanta, Rowdra Ghatak and Sekhar Ranjan Bhadra Chaudhuri, "A Novel Hexagonal Wideband Circularly Polarized Stacked Patch Microstrip Antenna,"-- *Microwave and Optical Technology Letters*, 2015, Vol. 57, No. 11, November 2015, p.p. 2548 - 2554. Impact Factor – 0.57 citation – 0.
- 18. Abhishek Sarkhel, Debasis Mitra, Sandip Paul and Sekhar Ranjan Bhadra Chaudhuri, "A Compact Meta-atom for Dual Band Negative Permittivity Metamaterial", *Microwave and*

Optical Technology Letters, Vol. 57, No. 5, pp. 1152–1156, May,2015. Impact Factor – 0.57. citation - 0

- 19. Tapas Mondal, Taniya Roy, Rowdra Ghatak and Sekhar Ranjan Bhadra Chaudhuri, "Novel Adaptive Blind Spot Detector Using Square Modified Cantor Fractal Microstrip Antenna Array", Microwave and Optical Technology Letters (MOTL), WILEY, Vol. 57, No. 5, pp. 1067—1072, April, 2015. Impact Factor - 0.57, citation – 1.
- Tapas Mondal, S. Samanta, Rowdra Ghatak, and Sekhar Ranjan Bhadra Chaudhuri, "A Novel Tri- Band Hexagonal Microstrip Patch Antenna Using Modified Sierpinski Fractal For Vehicular Communication" - *Progress In Electromagnetics Research (PIER - C)*, Vol. 57, pp.,25—34, 2015, March 2015. Impact Factor -1.23, citation – 2
- 21. D.Mondal, D.Pal and C. RoyChaudhuri," Real Time Sensing of Epithelial Cell-Cell and Cell-Substrate Interactions by Impedance Spectroscopy on Porous Substrates", *Journal of Applied Physics (American Institute of Physics)*, vol. 118, no. 4,2015, pp. 044701-14, Impact Factor: 2.18, citations: 2
- 22. N.Das, C.RoyChaudhuri, "Reliability Study of Nanoporous Silicon Oxide Impedance Biosensor for Virus Detection: Influence of Surface Roughness", vol.15, no.3, 2015, pp. 402-409, *IEEE Transactions on Devices and Materials Reliability*, Impact Factor : 2.472, citations: 2
- C.RoyChaudhuri, "A Review on Porous Silicon Based Electrochemical Biosensors: Beyond Surface Area Enhancement Factor", *Sensors and Actuators B*(Elsevier), vol.210, April 2015, pp.310-323, Impact Factor: 3.8, citations: 6
- 24. H.Ghosh, C.RoyChaudhuri, "Noise Spectroscopy As an Efficient Tool For Impedance Based Sub-Femtomolar Toxin Detection In Complex Mixture Using Nanoporous Silicon Oxide", *Biosensors and Bioelectronics*(Elsevier), vol.67, May 2015, pp.757-762, Impact Factor: 6.451, citations: 6
- 25. J.Basu, S.Datta, C.RoyChaudhuri, "A graphene field effect capacitive Immunosensor for subfemtomolar food toxin detection", *Biosensors and Bioelectronics* (Elsevier), vol.68, June 2015, pp.544-549 (*published online in Times of India*, 6th April, 2015): Impact Factor: 6.451, citations: 8
- 26. P. Bhattacharyya, B. Bhowmik, H. J. Fecht, Operating Temperature, Repeatability and Selectivity of TiO₂ Nanotube based Acetone Sensor: Influence of Pd and Ni Nanoparticle Modifications, IEEE Transactions on Device and Materials Reliability (IEEE), vol. 15, no. 1, pp. 376-383, (2015), **Impact Factor: 1.544**, citation: 0.
- B. Bhowmik, P. Bhattacharyya, Highly Stable Low Temperature Alcohol Sensor Based on Hydrothermally Grown Tetragonal Titania Nanorods, RSC Advances (Royal Society of Chemistry) vol. 5, pp. 82159-82168, (2015), Impact Factor: 3.84, Citation: 0.

- A. Hazra, P. P. Chattopadhyay, P. Bhattacharyya, Hybrid Fabrication of Highly Rectifying p-n Homojunction based on Nanostructured TiO₂, IEEE Electron Device Letters (IEEE), vol. 36,No.
 5, pp. 505-507, (2015), Impact Factor: 2.754, Citation: 2.
- 29. A. Hazra, P. Bhattacharyya, Role of Junction Geometry in Determining the Rectification Performance of Nanostructured TiO₂ based p-n Junctions, IEEE Transactions on Electron Devices (IEEE), vol. 62,No. 6, pp. 1984-1990, (2015), **Impact Factor: 2.512,** Citation: 0.
- A. Hazra, B. Bhowmik, K. Dutta, P. P. Chattopadhyay, P. Bhattacharyya, Stoichiometry, Length and Wall Thickness Optimization of TiO₂ Nanotube Array for Efficient Alcohol Sensing, ACS Applied Materials and Interfaces (ACS), vol. 7, pp. 9336-9348, (2015) ,Impact Factor: 6.723, Citation: 2.
- 31. Bhowmik, Hans J Fecht, P. Bhattacharyya, Vertical Mode Gas Sensing Performance of TiO₂ Nanotube Array by Tuning of Surface Area and Carrier Transport Length, IEEE Sensors Journal (IEEE), vol. 15, no.10, pp.5919-5926, (2015), **Impact Factor: 1.852**, Citation: 1.
- A. Hazra, B. Bhowmik, K. Dutta, V. Manjuladevi, R. K. Gupta, P. Bhattacharyya, Low Temperature Methanol Sensing by p- type Nano Titania: Correlation with Defects States and Schottky Barrier Model, IEEE Transactions on Nanotechnology (IEEE), vol. 14,No. 1, pp. 187-195, (2015), (Impact Factor: 1.825), Citation: 1.
- 33. P. Bhattacharyya, B. Kundu, S. Ghosh, V. Kumar, A. Dandapat, Performance Analysis of a Low Power High Speed Hybrid 1 Bit Full Adder Circuit, IEEE Transactions on Very Large Scale Integration Systems (IEEE), (Accepted, in press 2015) (Impact Factor: 1.356), Citation: 5.
- 34. K. Dutta, P. P. Chattopadhyay, Chia-Wei Lu, Mon-Shu Ho, P. Bhattacharyya, A Highly Sensitive BTX Sensor based on Electrochemically Derived Wall Connected TiO₂ Nanotubes, Applied Surface Science (Elsevier), vol. 354, pp.353, 2015 (Impact Factor: 2.711), Citation: 2.
- 35. K. Dutta, B. Bhowmik, A. Hazra, P. P. Chattopadhyay, P. Bhattacharyya, An Efficient BTX Sensor based on p-Type Nanoporous Titania Thin Films, Microelectronics Reliability (Elsevier), vol. 55, pp. 558-564, (2015) (Impact Factor: 1.433), Citation: 1.
- D. Acharyya, P. Bhattacharyya, An efficient BTX sensor based on ZnO nanoflowers grown by CBD method, Solid State Electronics (Elsevier), vol. 106, pp. 18-26, (2015) (Impact Factor: 1.504), Citation: 3.
- K. Choudhary, V. Manjuladevi, R. K. Gupta, P. Bhattacharyya, A. Hazra, S. Kumar, Ultrathin films of TiO₂ nanoparticles at interfaces, Langmuir (American Chemical Society), vol. 31, pp. 1385-1392, (2015) (Impact Factor: 4.457), Citation: 5.
- 38. S. Basak, T Acharya, "Joint Power Allocation and Routing in Outage Constrained Cognitive Radio Ad Hoc Networks", Mobile Networks and Applications, Special issue on Green Communications and Networking, Springer, vol. 20, no. 5, 2015, pp. 636-648, Impact Factor: 1.045, citations: 1

- 39. S. Chatterjee, S. P Maity, T. Acharya, "On Optimal threshold selection in cooperative spectrum sensing for cognitive radio networks-an energy detection approach in using Fuzzy entropy maximization", Wireless Personal Communications, Special issue on Recent Advances in Mobile and Wireless Networks, Springer, vol. 84, no. 3, 2015, pp. 1605-1625, Impact Factor: 0.653, citations: 1
- T. Acharya, S.P. Maity, S. Mandal, "Outage minimized joint power and channel allocation in multihop cognitive radio networks: A lifetime centric approach", Wireless Personal Communications, Springer, vol. 83, no. 4, 2015, pp. 2519-2537, Impact Factor: 0.653, citations: 0
- 41. *Suranjana Banerjee*, and Monojit Mitra, "Heterojunction DDR THz IMPATT Diodes Based on Al_xGa_{1-x}N~GaN Material System, *Journal of Semiconductors*, China, 36(6) : pp. 064002-8, 2015. Impact Factor: 0.153, citations: 0
- Mihir Kumar Mahata, Saptarsi Ghosh, Subhashis Das, and Dhrubes Biswas, "Universal Band Gap Determination Model for Doped Semiconductor Materials", *ECS Solid State Letters*, 4 (12) P98-P101 (2015). Impact factor – 1.162, No. of citation – 0
- 43. Rahul Kumar, P. Mukhopadhyay, A. Bag, S. Kr. Jana, A. Chakraborty, S. Das, M. Kr. Mahata, D. Biswas, "Comparison of different pathways in metamorphic graded buffers onGaAs substrate: Indium incorporation with surface roughness", Applied Surface Science Vol. 324, pp. 304–309, (2015). Impact factor 2.735, No. of citation 2
- 44. Ankush Bag, Rahul Kumar, Partha Mukhopadhyay, Mihir K. Mahata, Apurba Chakraborty, Spatarsi Ghosh, Sanjay K. Jana, Dhrubes Biswas, "Evolution and Analysis of Nitride Surface and Interfaces by Statistical Techniques: A Correlation with RHEED through Kinetic Roughening", Electron. Mater. Lett., Vol. 11, No. 4 (2015), pp. 707-716. Impact factor – 1.98, No. of citation – 1
- 45. Sanjay Kr. Jana, Saptarsi Ghosh, Syed Mukulika Dinara, Mihir Mahata, Soumen Das, and Dhrubes Biswas, "Structural, optical, and transport properties of AlGaN/GaN and AlGaN/InGaN heterostructure on sapphire grown by plasma assisted molecular beam epitaxy", Journal of Vacuum Science & Technology B 33, 041206 (2015). Impact factor 1.464, No. of citation 0

<u>2014</u>

- 46. Tapan Mondal and Santanu Das, "Design and Analysis of a Coplanar Waveguide Fed Ultrawideband Hexagonal Open Slot Antenna with WLAN and WiMAX Band Rejection," *Microwave and Optical Technology Letters*, Vol.56, No.2, pp.434-443, Feb 2014. Impact Factor: 0.568, Citation 02
- 47. Tapan Mondal and Santanu Das, "Coplanar waveguide fed 9-point star shape monopole antennas for worldwide interoperability for microwave access and wireless local area network applications," *Journal of Engineering*, pp.1-6, 2014. Citation 0

- 48. Tapan Mondal and Santanu Das, "A Coplanar Waveguide Fed Hexagonal Shape Ultra Wide Band Antenna with WiMAX and WLAN Band Rejection," *Radio Engineering Journal*, Vol. 23, No 4, pp.1077-1085, 2014. Impact Factor 0.837, Citation - 01
- 49. Tapan Mondal and Santanu Das, "Design of a CPW Fed Simple Hexagonal Shape UWB Antenna with WLAN and WiMAX Band Rejection Characteristics," *Journal of Computational Electronics (JCEL)*, vol.14, no.1, pp.300-308, 2014. Impact Factor 1.520, Citation 03
- 50. Tapan Mondal and Santanu Das, "Design of dual notch band UWB printed monopole antenna using electromagnetic-bandgap structure," *Microwave and Optical Technology Letters*, Vol.56, No.9, pp.2195-2199, Sep 2014. Impact Factor: 0.568, Citation 01
- 51. Tapan Mondal and Santanu Das, "Design of a Microstrip Fed Printed Monopole Antenna for Bluetooth and UWB Applications with WLAN Notch Band Characteristics," *International Journal of RF and Microwave Computer-Aided Engineering*, Vol 25, No 2, pages 66-74, 2014. Impact Factor: 0.538, Citation – 02
- 52. Debasis Mitra, Abhishek Sarkhel, Olyvia Kundu and Sekhar Ranjan Bhadra Chaudhuri, "Design of Compact and High Directive Slot Antennas Using Grounded Metamaterial Slab", *IEEE Antennas and Wireless Propagation Letters*, VOL 14, 2015, pp.811-814, December, 2014. Impact Factor -1.58. citation – 0
- 53. Tanmay Bhattacharya, Sirshendu Hore and S. R. Bhadra Chaudhuri, "A Semi-Fragile Blind Digital Watermarking Technique for Medical Image File Authentication using Stationary Wavelet Transformation", International Journal of Computer Applications (IJCA), Volume 104 – No 11, October 2014, p.p. 8-13. Impact Factor - N.A. citation – 1
- 54. K.K.Mistry, K.Layek, S.Kashyap, C.RoyChaudhuri, H.Saha "A comparative study in electrochemical response of some commercial screen–printed electrodes (SPEs)", *Sensor Letters*(American Scientific Publishers), vol.12, no.12,2014, pp.1750-1759(Impact Factor: 1.587), citations: 2
- 55. K.K.Mistry, K.Layek, A.Mahapatra, C.RoyChaudhuri, H.Saha, "A review on amperometric-type immunosensors based on screen-printed electrodes", *Analyst*, (Royal Society of Chemistry), vol.139, no.10, 2014, pp.2289-2311 (Impact Factor: 4.23), citations: 20
- 56. N.Samanta, A.K.Chanda, C.RoyChaudhuri, "An Energy Efficient, Minimally Intrusive Multi-Sensor Intelligent System For Health Monitoring Of Elderly People", *International Journal of Smart Sensing and Intelligent Systems*(ISSN 1178-5608), vol.7,no.2,2014,pp.762-780, citations: 10
- 57. P. Bhattacharyya, Technological Journey towards Reliable Microheater Development for MEMS Gas Sensors: A Review, IEEE Transactions on Device and Materials Reliability (IEEE), vol. 14,No. 2, pp. 589-599, (2014) (Impact Factor: 1.544), Citation: 4.

- 58. A. Hazra, K. Dutta, B. Bhowmik, P. P. Chattopadhyay, P. Bhattacharyya, Room Temperature Alcohol Sensing by Oxygen Vacancy Controlled TiO₂ Nanotube Array, Applied Physics Letters (AIP), vol. 105, pp. 081604(1-5), (2014) (Impact Factor: 3.302), Citation: 10.
- A. Hazra, P. Bhattacharyya, Tailoring of the Gas Sensing Performance of TiO₂ Nanotubes by 1-D Vertical Electron Transport Technique, IEEE Transactions on Electron Devices (IEEE), vol. 61,No. 10, pp. 3483-3489 (2014) (Impact Factor: 2.512), Citation: 8.
- 60. A. Hazra, K. Dutta, B. Bhowmik, P. Bhattacharyya, Highly Repeatable Low ppm Ethanol Sensing Characteristics of p-TiO₂ based Resistive Devices, IEEE Sensors Journal (IEEE), vol. 15,No. 1, pp. 408-416 (2014) (Impact Factor: 1.852), Citation: 8.
- B. Bhowmik, A. Hazra, K. Dutta, P. Bhattacharyya, Repeatability and Stability of Room Temperature Acetone Sensor based on TiO₂ Nanotubes: Influence of Stoichiometry Variation, IEEE Transactions on Device and Materials Reliability (IEEE), vol. 14,No. 4, pp. 961-967 (2014) (Impact Factor: 1.544), Citation: 7.
- 62. B. Bhowmik, K. Dutta, A. Hazra, P. Bhattacharyya, Low Temperature Acetone Detection by ptype Nano-Titania Thin Film: Equivalent Circuit Model and Sensing Mechanism, Solid State Electronics (**Elsevier**), vol. 99, pp. 84-92, (2014) (**Impact Factor:** 1.504), Citation: 14.
- 63. A. Hazra, B. Bhowmik, K. Dutta, V. Manjuladevi, R. K. Gupta, P.P. Chattopadhyay, P. Bhattacharyya, Structural and Optical Characterizations of Electrochemically Grown Connected and Free Standing TiO₂ Nanotube Array, Journal of Electronic Materials (Springer), vol. 43, No. 9, pp. 3229-3235, (2014) (**Impact Factor:** 1.798), Citation: 3.
- 64. A. Hazra, B. Bhowmik, K. Dutta, V. Manjuladevi, R. K. Gupta, P.P. Chattopadhyay, P. Bhattacharyya, Formation Mechanism of Anodically Grown Free-standing TiO₂ Nanotube Array under the Influence of Mixed Electrolytes, Science of Advanced Materials (American Scientific Publishers), vol. 6, pp. 714-719, (2014) (Impact Factor: 2.598), Citation: 9.
- 65. D. Acharyya, A. Hazra, P. Bhattacharyya, A Journey Towards Reliability Improvement of TiO₂ based Resistive Random Access Memory: A Review, Microelectronics Reliability (Elsevier), vol. 54, pp. 541-560 (2014) (Impact Factor: 1. 433), Citation: 18.
- 66. P. Saha, D. Kumar, P. Bhattacharyya, A. Dandapat, Design of 64 bit squarer based on Vedic Mathematics, Journal of Circuits, Systems, and Computers, (World Scientific), (ISSN: 0218-1266), vol. 23, No. 6, pp. 1450092-14500111 (2014), Citation: 0.
- 67. P. Saha, A. Banerjee, A. Dandapat, P. Bhattacharyya, A High Speed Multiplier using High Accuracy Floating Point Logarithmic Number System, Scientia Iranica D (ISSN : 1026-3098), vol. 21, No. 3, pp. 826-841 (2014) (Impact Factor: 0.35), Citation: 0.
- 68. S. Chatterjee, S. Maity, T. Acharya, "Energy Efficient Cognitive Radio System for Joint Spectrum Sensing and Data Transmission", IEEE Journal on Emerging and Selected Topics in Circuits and Systems, vol. 4, no.3, 2014, pp. 292-300, Impact Factor: 1.524, citations: 16

- S. Chatterjee, T. Acharya, S. P. Maity, "On Optimized Decode and Forward Relay Assisted CR System Design for Throughput Maximization", Elsevier Journal on Digital Signal Processing, vol. 34, 2014, pp. 92-100, Impact Factor: 1.256, citations: 1
- 70. Suranjana Banerjee, Aritra Acharyya, Monojit Mitra and J. P. Banerjee, "A Four-Step Iterative Design Optimization Technique for DLHL IMPATTs," IETE Journal of Research [India], Taylor & Francis, Vol 60, Issue 4, 2014.
- 71. Aritra Acharyya, Subhashri Chatterjee, Jayabrata Goswami, Suranjana Banerjee and J. P. Banerjee, "Quantum Drift-Diffusion Model for IMPATT Devices," *Journal of Computational Electronics*, vol. 13, pp. 739-752, 2014. (Impact Factor: 1.372 (2013))
- 72. Aritra Acharyya, Jayabrata Goswami, Suranjana Banerjee and J. P. Banerjee, "Estimation of Most Favorable Optical Window Position Subject to Achieve Finest Optical Control of Lateral DDR IMPATT Diode Designed to Operate at W-Band," *Radioengineering*, vol. 23, no. 2, pp. 739-753, 2014. (Impact Factor: 0.796 (2013))
- 73. Aritra Acharyya, Suranjana Banerjee and J. P. Banerjee, "Optical Control of Large-Signal Properties of Millimeter-Wave and Sub-Millimeter-Wave DDR Si IMPATTs," *Journal Computational Electronics*, vol. 13, pp. 408-424, 2014. (Impact Factor: 1.372 (2013)), citation – 0
- 74. Mihir Kumar Mahata, Saptarsi Ghosh, Sanjay Kumar Jana, Apurba Chakraborty, Ankush Bag, Partha Mukhopadhyay, Rahul Kumar, and Dhrubes Biswas, "Comprehensive strain and band gap analysis of PA-MBE grown AlGaN/GaN heterostructures on sapphire with ultra thin buffer", *AIP Advances*, vol. 4, pp. 117120, Nov. 2014. Impact factor – 1.591, citation – 4

<u>2013</u>

- 75. Tapan Mondal and Santanu Das, "Microstrip feed Spanner Shape Monopole Antennas for Ultra Wide Band Applications" *Journal of Microwaves, Optoelectronics and Electromagnetic Applications*, Vol.12, No.1, pp.15-22, January 2013, Citation 02
- 76. Tamasi Moyra, Santanu Das and Susanta Kumar Parui, "Design And Validation Of Low-Pass Filter Using Microstrip Stub And Defected Ground Structure," *Microwave And Optical Technology Letters*, Vol.55, No.3, pp.571-573, March 2013. Impact Factor: 0.568, Citation - 01
- 77. Tapan Mondal and Santanu Das, "UWB Printed Plaque Monopole Antennas for Tri-Band Rejection" *Microwave and Optical Technology Letters*, Vol.55, No.3, pp.674-680, March 2013. Impact Factor: 0.568, Google Scholar Citation - 01
- 78. Tapan Mondal and Santanu Das, "An Optimal Design Of CPW-Fed UWB Aperture Antennas With WIMAX/WLAN Notched Band Characteristics," *Progress In Electromagnetics Research* C, Vol.35, pp.161-175, 2013. Citation - 07
- 79. Tapan Mondal and Santanu Das, "A Coplanar Waveguide-Fed Ultra Wideband Hexagonal Slot Antenna With WLAN Band Rejection," *Journal of Radio Electronics*, Vol.N9, pp.1-17, 2013. Citation - 01

- 80. Somdotta Roy Choudhury, Susanta Kumar Parui and Santanu Das, "Design of a Compact Wideband Log Periodic Spur Line Bandstop Filter," *International Journal of Engineering and Advanced Technology (IJEAT)*, Vol.3, Issue.1, pp.5-13, October 2013. Citation 01
- 81. Krishnendu Chattopadhyay, Swarup Das, Santanu Das and Sekhar Ranjan Bhadra Chaudhuri, "Ultrawideband Performance of Printed Hexagonal Wideslot Antenna with Dual Band-Notched Characteristics," *Progress in Electromagnetic Research*, PIER-'C', vol.44, pp.83-93, October 2013. Citation - 05
- 82. Krishnendu Chattopadhyay, Tannisita Mitra, Dhruba Das, Santanu Das and Sekhar Ranjan Bhadra Chaudhuri, "Bandwidth Enhancement of Hexagonal Wide Slot Antenna Using a Tuning Stub," *IETE Journal of Research*, Vol.59, Issue 6, Nov-Dec 2013. Citation 0
- 83. Krishnendu Chattopadhyay, Somdotta Roy Chowdhury, Santanu Das and Sekhar Ranjan Bhadra Chaudhuri, "Wideband Microstrip-line-fed Hexagonal Slot Antenna for WiMAX and Wireless Local Area Network Applications," *The Journal of Engineering*, IET, pp. 2013, Citation – 0
- 84. Debasis Mitra, S. Paul, D. Bhattacharya and Sekhar Ranjan Bhadra Chaudhuri, "Radiated Power Enhancement of Quadrupole source using Metamaterials", *Microwave and Optical Technology Letters*, Vol. 55, Issue 11, Nov-Dec 2013, p.p.2620-2624. Impact Factor: 0.623. No. of citation 2
- 85. Sirshendu Hore, Tanmay Bhattacharya and S. R. Bhadra Chaudhuri, "A Robust Medical Image Authentication Technique using QR Code and DWT", *International Journal of Computer Applications*, Volume 83 – No.16, Nov-Dec 2013, pp. 21-26. Impact Factor: N.A., No. of citation – 0
- 86. Sirshendu Hore, Tanmay Bhattacharya and S. R. Bhadra Chaudhuri, "A Sustainable Medical Image Authentication Technique in Spatial Domain Using Multiple QR Code", *International Journal of Engineering Research and Applications*, Vol. 3, Issue 6, Nov-Dec 2013, pp. 2042-2047. Impact Factor: 1.23, No. of citation - 0
- 87. P.S.Banerjee, J.Paul Choudhuri, and S.R.Bhadra Chaudhuri, "Fuzzy Membership function in a Trust Based AODV for MANET", International Journal of Computer Network & Information Security, IJCNIS, September, 2013, 12, 27-34. DOI: 10.5815 / ijcnis.2013.12.04.
 Impact Factor: N.A. ,No. of citation 3
- 88. H. Ghosh, C.RoyChaudhuri, 'Ultrasensitive Food Toxin Biosensor Using Frequency Based Signals of Silicon Oxide Nanoporous Structure', *Applied Physics Letters*, vol.102,no.24,2013, p.243701(1-4) (Impact Factor: 3.79), No. of citations: 18

- D.Mondal and C.RoyChaudhuri, "Extended Electrical Model for Impedance Characterization of Cultured HeLa Cells in Non-Confluent State Using ECIS Electrodes", *IEEE Transactions on Nanobioscience*, vol.12, no.3, 2013,pp.239-246(**Impact Factor**: 1.42), No. of citations: 5
- 90. C.RoyChaudhuri, D.Mondal, "Electrode Optimization for Impedance Evaluation of Biological Cell Culture under Variable Frequency Low Intensity Sinusoidal Electric Field", *IEEE Transactions on Dielectric and Electric Insulation*, vol.20, no.2, 2013, pp.382-390(Impact Factor: 1.46), No. of citations: 4
- N.Samanta, O.Kundu and C.RoyChaudhuri, "A Simple Low Power Electronic Readout for Rapid Bacteria Detection with Impedance Biosensor", *IEEE Sensors*, vol.13,no.12, 2013, pp.4716-4724 (Impact Factor: 1.52): No. of citations: 4
- 92. N. Banerjee, B. Bhowmik, S. Roy, C.K. Sarkar, P. Bhattacharyya, Anomalous Recovery Characteristics of Pd Modified ZnO Nanorod Based Acetone Sensor, Journal of Nanoscience and Nanotechnology (American Scientific Publishers), vol. 13, pp.1-8. (2013) (Impact Factor: 1.556), Citation: 5.
- 93. S. Roy, N. Banerjee, C. K. Sarkar and P. Bhattacharyya, Development of an Ethanol Sensor based on CBD Grown ZnO Nanorods, Solid State Electronics (Elsevier), vol. 87, pp. 43-50 (2013).(Impact Factor: 1.504), Citation: 14.
- 94. A. Hazra, S. Das, J Kanungo, E. Bontempi, C. K. Sarkar, P. Bhattacharyya, Sukumar Basu, Influence of Temperature, Voltage and Hydrogen on the Reversible Transition of Electrical Conductivity in Sol-Gel Grown Nanocrystalline TiO2 Thin Film, Journal of Materials Science: Materials in Electronics (Springer), vol. 24 pp.1658-1663 (2013). (Impact Factor: 1.569), Citation: 5.
- 95. Z. Darmastuti, P. Bhattacharyya, M. Andersson, J. Kanungo, S. Basu, P-O. Käll, L. Ojamäe, A. Lloyd Spetz, SiC-FET Methanol Sensors for Process Control and Leakage Detection, Sensors and Actuators B (Elsevier), vol. 178 (2013) pp.385-394. (Impact Factor: 4.097), Citation: 2.
- 96. N. Banerjee, S. Roy, C. K. Sarkar, P. Bhattacharyya, High Dynamic Range Methanol Sensor based on Aligned ZnO Nanorods, IEEE Sensors Journal (IEEE), vol. 13, No. 5 pp.1669-1676 (2013). (Impact Factor: 1.852), Citation: 15.
- 97. D. Ghosh, P. C. Mondal, D. Kayal, P. Bhattacharyya, A. Dandapat, A Novel Design of Seven Segment Decoder using Cyclic Combinational Technique, Journal of Low Power Electronics (American Scientific Publishers), vol. 9, pp. 1-6 (2013) (Impact Factor: 0.485), Citation: 0.
- 98. P. Saha, A. Banerjee, P. Bhattacharyya, A. Dandapat, Improved Matrix Multiplier Design for High Speed DSP Applications, IET Circuits, Devices and Systems (IET), pp. 1-11 Vol. (2013) (Impact Factor: 0.912), Citation: 3.
- 99. D. Acharyya, A. Hazra, K. Dutta, R. K. Gupta, P. Bhattacharyya, Highly Repeatable Multi Level Resistive Switching Characteristics of Au/TiO₂/Ti Memory Device, Semiconductor Science and

Technology (Institute of Physics (IOP Publishing), Vol. 28 pp. 125001-125007 (2013) (Impact Factor: 2.190), Citation: 7.

- 100. T. Acharya, G. Paul, "Maximum lifetime broadcast communications in cooperative multi-hop wireless ad hoc networks: centralized and distributed approaches", Elsevier Journal of Ad Hoc Networks, vol.11, no. 6, 2013, pp. 1667-1682, Impact Factor: 1.530, citations: 8
- 101. Suranjana Banerjee, Aritra Acharyya and J. P. Banerjee, "Noise Performance of Heterojunction DDR MITATT Devices Based on $Si \sim Si_{1-x}Ge_x$ at W-Band," Active and Passive Electronic Components [USA], vol. 2013, pp. 1-7, 2013.
- 102. Aritra Acharyya, Suranjana Banerjee and J. P. Banerjee, "Influence of Skin Effect on the Series Resistance of Millimeter-Wave of IMPATT Devices," *Journal Computational Electronics*, vol. 12, issue 3, pp. 511-525, 2013. (Impact Factor: 1.372 (2013))
- 103. Aritra Acharyya, Jit Chakraborty, Kausik Das, Subir Datta, Pritam De, Suranjana Banerjee and J. P. Banerjee, "Large-Signal Characterization of DDR Silicon IMPATTs Operating up to 0.5 THz," *International Journal of Microwave and Wireless Technologies*, vol. 5, no. 5, pp. 567-578, 2013. (Impact Factor: 0.570 (2013))
- 104. Aritra Acharyya, Jit Chakraborty, Kausik Das, Subir Datta, Pritam De, Suranjana Banerjee and J. P. Banerjee, "Large-Signal Characterization of DDR Silicon IMPATTs Operating in Millimeter-Wave and Terahertz Regime," *Journal of Semiconductors*, vol. 34, no. 10, 104003-8, 2013.
- 105. Aritra Acharyya, Koyel Datta, Raya Ghosh, Monalisa Sarkar, Roshmy Sanyal, Suranjana Banerjee and J. P. Banerjee, "Diamond Based DDR IMPATTs: Prospects and Potentiality as Millimeter-Wave Source at 94 GHz Atmospheric Window," *Radioengineering*, vol. 22, no. 2, pp. 624-631, 2013. (Impact Factor: 0.796 (2013))
- 106. Aritra Acharyya, Suranjana Banerjee and J. P. Banerjee, "Effect of Photo-Irradiation on the Noise Properties of Double-Drift Silicon MITATT Device," *International Journal of Electronics*, 2013, published online, DOI: 10.1080/00207217.2013.830460. (Impact Factor: 0.751 (2013))
- 107. Aritra Acharyya, Suranjana Banerjee and J. P. Banerjee, "A Proposed Simulation Technique to Study the Series Resistance and Related Millimeter-Wave Properties of Ka-Band Si IMPATTs from the Electric Field Snap-Shots," *International Journal of Microwave and Wireless Technologies*, vol. 5, no. 1, pp. 91-100, 2013. (Impact Factor: 0.570 (2013))

Conference Proceedings

<u>2016</u>

- 1. Debamita Kumar, Ankita Pramanik, Sudeshna Sil Kar, Santi P. Maity, "Retinal Blood Vessel Segmentation Using Matched Filter and Laplacian of Gaussian,", SPCOMM, 2016, Citations:0
- 2. Govind Tanwar and Sekhar Ranjan Bhadra Chaudhuri , " A Novel Approach to Remove Random-valued Impulse Noise from digital Images", 22nd National Conference on Communications"(NCC), IIT- Guwahati, Assam, India, March, 04-06, 2016

<u>2015</u>

- 3. Arijit Dutta and Ankita Pramanik, "Modified Approximate Lower Triangular Encoding of LDPC Codes,", IEEE International Conference on Advances in Computer Engineering and Applications, pp. 364-369, 2015, Citations:0
- 4. Rajat Kanti Sarkar and Ankita Pramanik, "Segmentation Of Plant Disease Spots Using Digital Image Processing," IEEE International Conference on Advances in Computer Engineering and Applications, pp. 1-5, 2015, Citations:0
- 5. Soham Bhattacharjee, Saikat Kundu Chowdhury, Shrayan Das and Ankita Pramanik, "DPCM Block-based Compressed Sensing With Frequency Domain Filtering and Lempel-Ziv-Welch Compression,", IEEE International Conference on Advances in Computing, Communications and Informatics, pp. 1244-1249, 2015, Citations:1
- 6. Abhishek Kashyap, Ankita Pramanik, Santi P. Maity, "On Block Compressed Sensing far end reconstruction using OFDM,", Proceedings of Third International Conference on Image Information Processing (ICIIP), pp 162-167, 2015, Citations:1
- 7. Ankita Pramanik, Abhishek Kashyap, Santi P. Maity, "Study on Sampling Matrices for far-end image reconstruction by Block Compressed Sensing,", Proceedings of the First IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering, Proceedings of the First IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering, pp. 346-349,2015, Citations:0
- Ankita Pramanik, Santi P. Maity, "DPCM-Quantized Block-Based Compressed Sensing of images using Robbins Monro approach,", Proceedings of the First IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering, pp. 18-21, 2015, Citations:0
- 9. Ankita Pramanik, Santi P. Maity, "CS Reconstruction in MIMO Channel using Square Complex Orthogonal STB Codes,", IEEE(EDS) Sponsored 4th International Conference on Computing, Communication and Sensor Network, 2015, Citations:0
- 10. Ankita Pramanik, Santi P. Maity, "On CS Reconstruction Images using LDPC Code over Radio Mobile channel,", Proceedings IEEE Global Wireless Summit Wireless Vitae, 2015, Citations:0
- 11. Suranjana Banerjee, Aritra Acharyya, and Monijit Mitra, "Design Optimization and Large-Signal Simulation of DLHL Si IMPATT Diode at 60 GHz," Accepted in International Conference on Computer, Communication, Control and Information Technology (C3IT),

Academy of Technology, Adisaptagram, Hooghly 712121, West Bengal, India, February 7-8, 2015.

- 12. Suranjana Banerjee, Aritra Acharyya, J. P. Banerjee, and Monijit Mitra, "94 GHz Multiquantum Well IMPATT Diodes based on 3C-SiC/Si Material System," Accepted in International Conference on Computer, Communication, Control and Information Technology (C3IT), Academy of Technology, Adisaptagram, Hooghly 712121, West Bengal, India, February 7-8, 2015.
- 13. Suranjana Banerjee, Aritra Acharyya, J. P. Banerjee, and Monojit Mitra, "Large-Signal and Noise Properties of Heterojunction DDR IMPATTs Based on Al_xGa_{1-x}N~GaN Material System at 1.0 THz," Accepted in International Conference on Foundations and Frontiers <u>in</u> <u>Communication, Computer and Electrical Engineering (C2E2) 2015 will be held on 9th -10th</u> Jan, SKFGI, Mankundu, Hooghly, WB, India, 2015.
- 14. Jeet Ghosh, Debasis Mitra, Sekhar Ranjan Bhadra Chaudhuri, "Circularly Polarized Hexagonal Slot Antenna For Broadband Application" *IEEE-AEMC-2015*, December-2015, Guwahati, India. Citations:0
- 15. Gopinath Samanta, Dhrubajyoti Bhattacharya, Debasis Mitra, Sekhar Ranjan Bhadra Chaudhuri," Miniaturized CPW-Fed Slot Antenna Using Reactive Impedance Substrate" *IEEE-AEMC-2015*, December-2015, Guwahati, India, Citations:0
- 16. Abhishek Sarkhel and Sekhar Ranjan Bhadra Chaudhuri" Design of Miniaturized PIFA with Magnetic Resonator Metamaterial Loading" *IEEE-AEMC-2015*, December-2015, Guwahati, India
- 17. Abhishek Sarkhel and Sekhar Ranjan Bhadra Chaudhuri ,"Design of a Compact Triple-Band Metamaterial Absorber with Wide Angle of Incidence using Connected Resonator Topology", *International Conference in Electromagnetics for Advanced Applications*, September 7-11, 2015, Torino, Italy. Citations:0
- 18. Debasis Mitra, Dhruba Das, and Sekhar Ranjan Bhadra Chaudhuri, "Miniaturization of Meandered Line Slot Antenna", *International Conference on Antenna Propagation for Wireless Communication*, September 7-11, 2015, Torino, Italy. Citations:0

<u>2014</u>

- 19. Aritra Acharyya, Jayabrata Goswami, Suranjana Banerjee, and J. P. Banerjee, "Effects of Quantum Correction on the Large-Signal Characteristics of DDR IMPATTs Based on Silicon," *in Proceedings of National Conference on Materials, Devices and Circuits in Communication Technology, Burdwan*, 7th and 8th February, 2014, pp. 1-4.
- 20. Mihir Kr. Mahata, Saptarsi Ghosh, Sanjay Jana, Partha Mukhopadhyay, Ankush Bag, Syed Mukulika Dinara, Rahul Kumar, Subhashis Das, Apurba Chakraborty and Dhrubes Biswas,"

Growth and characterization of Al_{0.15}Ga_{0.85}As/GaAs pseudomorphic heterostructure by MBE" In proceeding IEEE Students' Technology Symposium 2014, IIT kharagpur, India, Feb. 2014, pp.390-392.

- 21. Rahul Kumar, P. Mukhopadhyay, S.K. Jana, A. Bag, S. Ghosh, S. Das, M.K. Mahata and D. Biswas, "Comprehensive study of AlGaAs/GaAs heterostructures grown by MBE: Structural and compositional analysis", ICEE 2014, 15th to 17th December.
- 22. Subhashis Das, S. Majumdar, R. Kumar, M. K. Mahata, S. M. Dinara and D. Biswas, "Comprehensive modeling of gas sensor based on Si₃N₄ passivated AlGaN/GaN Schottky diode", ICEE 2014, 15th to 17th December.
- 23. Tapas Mondal, Susamay Samanta, Rowdra Ghatak and S. R. Bhadra Chaudhuri, "A Novel Circularly Polarized DSRC Band Square Microstrip Antenna Using Minkowski Fractal Structure for Vehicular Communication", *IEEE International Conference on Vehicular Electronics and Safety*, pp. 141–146, Hyderabad, India, Dec, 2014.
- 24. Partha Sarathi Banerjee, Subhankar Das, Krishanu Das and S. R. Bhadra Chaudhuri, AMSPR: A Secure Multipath Routing in Mobile Ad Hoc Networks (MANET)", *ICDCCoM 2014*,BIT Mesra, India, September, 12-13,2014.

<u>2013</u>

- 25. Ankita Pramanik, A. Chakraborty and Rekha A. B., "Accuracy of GNSS receivers under various Satellite tracking and frequency of operations in India,", ISRO - A National Conference on Applications and Challenges in Space Based Navigation, Citations: 0
- 26. Ankita Pramanik, G. Patil and L. Borman, "New 0.86 rate Quasi-Cyclic LDPC code for radio application,", *International Conference on Information Technology, Electronics and Communications, 2013*, Citations:2.
- 27. Ankita Pramanik, G. Patil and L. Borman, "Small length Quasi-Cyclic LDPC code for wireless applications,", IEEE Annual International Conference on Emerging Research Areas, pp. 1-5, 2013, Citations:3.
- 28. A. Chakraborty, Ankita Pramanik and Rekha A. B., "Study of RTK performance of GNSS receivers under various Satellite tracking and frequency of operations,", IEEE Annual International Conference on Emerging Research Areas, pp. 1-5, 2013, Citations:0
- 29. S. Rathore, Ankita Pramanik and K. J. Prasad, ""Binary offset carrier modulation" for wireless radio communication,", International Conference on Electronics and Communication Engineering, 2013, Citations:0
- 30. Ankita Pramanik, G. Patil and L. Borman, "New High Rate LDPC codes for radio applications,", IEEE International Conference on Advanced Computing Technologies, pp. 1-5.,2013,Citations:0
- 31. Ankita Pramanik, G. Patil and L. Borman, "Small length DVB-S2 type LDPC Codes,",International Conference on Technical and Managerial Innovation in Computing and Communications in Industry and Academia, Citations:0

- 32. Pragadeeswaran, Ankita Pramanik and L. Borman, "Binary Offset Carrier Modulation for a 38.4 kbps Radio,", IEEE sponsored International Conference on Emerging Trends in Communication, Control, Signal Processing and Computing Applications, pp. 1-5, 2013, Citations:0
- 33. Suranjana Banerjee, Aritra Acharyya, Monojit Mitra and J. P. Banerjee, "Large-signal Properties of 3C-SiC/Si Heterojunction DDR IMPATT Devices at Terahertz Frequencies," The 34th PIERS in Stockholm, Sweden, **pp. 462-467**, August 12-15, 2013.
- 34. S.Ghosal and S.R.Bhadra Chaudhuri "Analysis of a rectangular slot in a microstrip patch antenna with an equivalent circuit model", *IEEE-AEMC-2013*, December, Bhubaneswar, India
- 35. S.Basu Pal, S.Bijali, S.R.Bhadra Chaudhuri, D. Mukherjee "Modelling Solar PV Behavior using the Interpolation Approach for Climatic Conditions of Eastern India", *ICES-2013*, Beijing, China. November, 2013.
- 36. S.Basu Pal, S.R.Bhadra Chaudhuri, D.Mukherjee "A comparative examination of Relative Power Losses in PV strings: An Indian experience", *IEEE sponsored PVSEC-23*, Taipei, Taiwan, October, 2013.

Patents

<u>2015</u>

1.Partha Bhattacharyya, Arnab Hazra, A process for fabricating an undoped transition metal oxide (TMO) based p-n homojunction diode with high rectification efficiency, Indian Patent application no. 581/KOL/2015(Filed on 27.05.2015).

2. N.Samanta, A.K.Chanda, C.RoyChaudhuri,Non-invasive camera less wireless sensor system for monitoring of elderly people staying alone, filed for Indian Patent, 647/KOL/2015

<u>2014</u>

3.Joint Inventor of Process Patent entitled "A PROCESS FOR CONFIGURING INSOLATION - INTELLIGENT BIPV SYSTEMS" : Patent details filed in July, 2014, to Govt. of India Patent Office vide Indian Patent Application No. 815/KOL/2014 dated 31.07.2014, in the name of IIEST, Shibpur with proposed beneficiary as Dept. of Electronics and Telecommunication Engineering.

4.Partha Bhattacharyya, Arnab Hazra, A process for forming a TiO₂ Nanotube based room temperature (27°C) alcohol sensor device, Indian Patent application no.- 1286/KOL/2014(Filed on 11.12.2014).

5.Partha Bhattacharyya, Arnab Hazra, A process for forming an undoped p-type TiO_2 based sensor device for accurate sensing of low ppm ethanol at low temperature, Indian Patent application no. 1285/KOL/2014 (Filed on 11.12.2014).

Aerospace Engineering and Applied Mechanics

Publications

Journals:

- 1. Sengupta, A., Quadery, L., Sarkar, S. and Roy, R., "Influence of Bi-directional Near-fault Excitations on RC Bridge Piers", Journal of Bridge Engineering, ASCE (to appear), Impact Factor: 1.065, Citation: -.
- 2. Chabroborty, S. and Roy, R., "Role of Ground Motion Characteristics on Inelastic Seismic Response of Irregular Systems", Journal of Architectural Engineering, ASCE, *Special section on Housing and Residential Building Construction* (to appear), Impact Factor:-, Citation:-.
- 3. Roy, R., Ghosh, D and Bhattacharya, G., "Influence of Strong Motion Characteristics on Permanent Displacement of Slopes", Landslides, Springer, (to appear), Impact Factor: 2.87, Citation: -.
- 4. Banerjee, A.K, Pramanik, D. and Roy, R., "Seismic Structural Fragilities: Proposals for Improved Methodology per Spectral Matching of Accelerogram", Engineering Structures, Elsevier, Vol. 111, No. -, 2016, pp. 538-551, Impact Factor: 1.838, Citation: 1.
- Roy, R., Thakur, P and Chakroborty S., "Spectral Matching of Real Ground Motions: Applications to Horizontally Irregular Systems in Elastic Range", Advances in Structural Engineering, Multi-Sc. U. K., Vol. 17, No.11, 2014, pp. 1623-1638, Impact Factor: 0.582, Citation: 1.
- 6. Roy, R., Thakur, P and Chakroborty S., "Scaling of Ground Motions and Its Implications to Plan-asymmetric Structures", Soil Dynamics and Earthquake Engineering, Elsevier, Vol. 57, No. 1, 2014, pp. 46-67, Impact Factor: 1.215, Citation: 4.
- Roy, R. and Mahato, S., "Equivalent Lateral Force Method for Buildings with Setback: Adequacy in Elastic Range", Earthquakes and Structures, Techno Press, Vol.4, No.6, 2013, pp. 685-710, Impact Factor: 0.693, Citation: 1.
- 8. Roy, R. and Chakroborty, S., "Seismic Demand of Plan-asymmetric Structures: A Re-visit", Earthquake Engineering and Engineering Vibration, Springer, Vol.4, No.1, 2013, pp. 99-117, Impact Factor: 0.729, Citation: 9.
- 9. Mandal, B., Roy, R. and Dutta, S. C., "Lateral Capacity of Piles in Layered Soil: A Simple Approach", Structural Engineering and Mechanics, Techno Press, Vol.44, No.5, 2012, pp. 571-584, Impact Factor: 0.927, Citation: -.
- 10.Dutta, S. C. and Roy, R., "Seismic Demand of Low-rise Multistory Systems with General Asymmetry", Journal of Engineering Mechanics, ASCE, Vol.138, No.1, 2012, pp. 1-11, Impact Factor: 1.294, Citation:10.
- 11.Dutta, S. C. and Roy, R., "Performance of Seismically Designed Buildings under Blast Loadings", Iranian Journal of Science and Technology, Transaction B, Engineering, Vol. 36, No. C2, 2012, pp. 149-166, Impact Factor: 0.342, Citation: 2.
- 12.Das, P. K. and Roy, R., "Seismic Behaviour of Torsionally Unbalanced Structures: Influence of Strength Dependent Stiffness", International Journal of Earth Sciences and Engineering, Vol. 03, No. 03SPL, 2010, pp. 352-361, Impact Factor: -, Citation: -.
- Roy, R. and Dutta, S.C., "Inelastic Seismic Demand of Low-rise Buildings with Soil-flexibility", International Journal of Nonlinear Mechanics, Elsevier, Vol. 45, No. 4, 2010, pp. 419-432, Impact Factor: 1.977, Citation: 16.

- 14.Dutta, S. C., Dutta, S. and Roy, R., "Dynamic Behaviour of *R/C* Elevated Tanks with Soil-structure Interaction", Engineering Structures, Elsevier, Vol. 31, 2009, No. 11, pp. 2617-2629, Impact Factor: 1.838, Citation: 11.
- 15. Dutta, S. C., Raychowdhury, A., Chakrovorty, S. and Roy, R., "Pushover Analysis: Proposals for Modification", Structural Engineering International (Science and Technology), International Association of Bridge and Structural Engineering; Vol. 19, No. 3, 2009, pp. 249-255, Impact Factor: 0.414, Citation: 1.
- 16.Dutta, S. C., Bhattacharya, K., and Roy, R., "Effect of Flexibility of Foundations on Its' Seismic Stress Distribution", Journal of Earthquake Engineering, Taylor and Francis, Vol. 13, No. 1, 2009, pp. 22-49, Impact Factor: 1.175, Citation: 7.
- 17.Dutta, S. C., Roy, R., Das, P. K., Roy, R., Reddy, G. R., 'Seismic Safety of Structures: Influence of Soilflexibility, Asymmetry and Ground Motion Characteristics', Journal of Sound and Vibration, Elsevier, Vol. 307, No. 3-5, 2007, pp. 452-480, Impact Factor: 1.813, Citation: 9.
- 18.Bhattacharya, K., Dutta, S. C., and Roy, R., "Seismic Design Aids for Buildings Incorporating Soil-flexibility Effect", Journal of Asian Architecture and Building Engineering, Vol. 5, No. 2, 2006, pp.341-348, Impact Factor: 0.526, Citation: 1.
- 19.Dutta, S. C., Das, P. K., and Roy, R., "Seismic Behaviour of Code-Designed Bi-Dectionally Eccentric Systems", Journal of Structural Engineering, ASCE, Vol. 131, No. 10, 2005, pp. 1497-1514, Impact Factor: 1.504, Citation: 9.
- 20. Dutta, S. C., Roy, R., and Dutta, S., "Applicability of a Few Analytical Formulations for Dynamic Characteristics of Elevated Tanks with Battered Stagings", International Journal of Applied Mechanics and Engineering, Technical University Press, Zielona Gora, Poland, Vol. 9, No. 4, 2004, pp.803-819, Impact Factor: -, Citation: -.
- 21.Dutta, S. C., Bhttacharya, K., and Roy, R., "Response of Low-Rise Buildings under Seismic Ground Excitation Incorporating Soil-Structure Interaction", Soil Dynamics and Earthquake Engineering, Elsevier, Vol. 24, No. 12, 2004, pp. 893-914, Impact Factor: 1.215, Citation: 66.
- 22.Dutta, S. C., and Roy, R., "A Critical Review on Idealization and Modelling for Interaction among Soilfoundation Structure system", Computers and Structures, Elsevier, Vol. 80, No. 20-21, 2002, pp. 1579-1594, Impact Factor: 2.134, Citation: 181.
- 23. Roy, R., and Dutta, S. C., "Differential Settlement among Isolated Footings of Building Frames: The Problem, Its Estimation and Possible Measures", International Journal of Applied Mechanics and Engineering, Technical University Press, Zielona Gora, Poland, Vol. 6, No. 1, 2001, pp. 165 - 186, Impact Factor: -, Citation: 16.
- 24.Roy, R., Bhattacharya, K. and Dutta, S. C., "Behaviour of Grid Foundation under Static Gravity Loading", Journal of Institution of Engineers (India), Vol. 85, February, 2004, pp.261-268, Impact Factor: -, Citation: 5.
- 25.Debashis Pal and Suman Chakraborty, "Fluid flow induced by periodic temperature oscillation over a flat plate: Comparisons with the classical Stokes problems", *Physics of Fluids*, Vol. 27, 2015, pp. 053601(1-14), Impact Factor: 2.031, Citation: Nil
- 26.D. Mondal, D. Pal and C. RoyChaudhuri, "Real Time Sensing of Epithelial Cell-Cell and Cell-Substrate Interactions by Impedance Spectroscopy on Porous Substrates", *Journal of Applied Physics*, Vol. 118, 2015, pp. 044701(1-14), Impact Factor: 2.183, Citation: 1
- 27. Debashis Pal and Suman Chakraborty, "Spatially uniform microflows induced by thermoviscous expansion along a traveling temperature wave: Analogies with electro-osmotic transport", *Physical Review E*, Vol. 86, 2012, pp. 016321(1-9), Impact Factor: 2.288, Citation: 1
- 28. Debashis Pal and Suman Chakraborty, "An Analytical Approach to the Effect of Finite-sized End Reservoirs on Electroosmotic Transport through Narrow Confinements", *Electrophoresis*, Vol. 32, 2011, pp. 638-645, Impact Factor: 3.028, Citation: 5

- 29.D. Pal, J. Bhattacharya, S. Chakraborty and P. Dutta, "An Enthalpy Model for Simulation of Dendritic Growth", *Numerical Heat Transfer*, Part B, Vol. 50, 2006, pp. 59-78, Impact Factor: 1.172, Citation: 22
- 30.Singh SK, Debnath K and Mazumder BS (2016). "Turbulence statistics of wave-current flow over a submerged cube". Journal of waterway, Port, coastal, and Ocean Engineering (ASCE). Doi: 10.1061\ (ASCE) ww.1943-5460.0000329. [Impact factor 1.107].
- 31.Barman K, Debnath K and Mazumder BS (2015). "Turbulence between two inline hemispherical obstacles under wave-current interactions". Advance in Water Resources, Elsevier. Doi. Org/10.1016/j.advwatres.2015.12.001 (Accepted),Impact factor 3.417, Citation:-.
- 32.Dutta, I. and Debnath, K. (2014). "Volume of fluid model of open channel contraction." Journal of the Institution of Engineers (India): Series C, Springer, 91(3), 251-259, Impact factor:-, Citation: 1
- 33.Roy S., Chatterjee, A and Debnath, K. (2014). "Numerical study of turbulence characteristics over rough bed." International Journal on Theoretical and Applied Research in Mechanical Engineering, 3(1), 44-49.
- 34. Chaudhuri S. and Debnath K. (2014). "Flume experiments to study equilibrium scour hole profile at circular bridge pier in clay sand mixed sediments" Journal of the Indian Geological Congress, 6(2), 31-40.
- 35.Debnath, K., and Chaudhury, S. Manik, M., K. (2013). "Local scour around abutment in clay/sand-mixed cohesive sediment bed" ISH Journal of Hydraulic Engineering, Taylor and Francis, DOI: 10.1080/09715010.2013.835103Impact factor:-, Citation: 1
- 36.Debnath, K., and Chaudhury, S. (2013). "Observations on initiation of pier scour and equilibrium scour hole profiles in cohesive sediments" ISH Journal of Hydraulic Engineering, Taylor and Francis, 19:1, 27-37
- 37.Debnath, K., and Chaudhury, S. (2012). "Local scour around non-circular piers in clay-sand mixed cohesive sediment beds." Engineering Geology, Elsevier, 151, 1-14, Impact factor: 1.8, Citation: 2
- 38.Debnath, K., Manik, M. K., Mazumder, B. S. (2012). "Turbulence statistics of flow over scoured cohesive sediment bed around circular cylinder." Advances in Water Resources, Elsevier , 41, 18-28, Impact factor: 3.417, Citation: 7
- Debnath, K., and Chaudhury, S. (2011). "Effect of suspended sediment concentration on local scour around cylinder for clay-sand mixed sediment beds." Engineering Geology, Elsevier, 117, 236-245,. Impact factor: 1.8, Citation: 6
- 40. Debnath, K., and Chaudhury, S. (2011). "Field Measurement and Formulations of Cohesive Sediment Erosion: A Review" Journal of the Institution of Engineers (Environmental Engineering Section) 91, 7-15.
- 41. Debnath, K., and Chaudhury, S. (2010). "Observations on scouring processes around cylinders embedded in clay-sand mixed cohesive sediments." Journal of the Indian Geological Congress, 2(2), 105-111.
- 42. Debnath, K., and Chaudhury, S. (2010). "Laboratory Experiments on Local Scour around Cylinder for Clay and Clay-Sand Mixed Beds." Engineering Geology, Elsevier, 111(1-4), 51-61, Impact factor: 1.8, Citation: 25
- Debnath, K., and Chaudhury, S. (2010). "Bridge Pier Scour in Clay-Sand Mixed Sediments at Near Threshold Velocity for Sand." Journal of Hydraulic Engineering, ASCE, 136(9), 597-609; Impact factor: 1.25, Citation: 16
- 44. Debnath, K., and Chaudhury, S. (2010). "Cohesive Sediment Erosion Threshold: A Review." ISH Journal of Hydraulic Engineering, Taylor and Francis, 16(1), 36-56. Citation: 5
- 45. Chaudhury, S., Mukhopadhyay, B. P., Debnath, K. (2010). "Experimental Study on Equilibrium Scour Hole Volume Around Circular Bridge pier in Clay-Sand Mixed Cohesive Sediment Beds." Journal of the Indian Geological Congress, 2(1), 47-53.
- 46. Nikora, V., Learned, S., Nikora, N., Debnath, K., Cooper, G., Reid, M. (2008). "Hydraulic resistance due to aquatic vegetation in small streams: a field study." Journal of Hydraulic Engineering, ASCE, 134(9), 1326-

1332. (2010 ASCE Journal of Hydraulic Engineering Best Technical Note Award),. Impact factor: 1.25, Citation: 57

- 47.Debnath, K., Bhattacharya, A. K., Mahato, B., Chakrabarti, A. (2008). "Volume of Fluid Model for Numerical Simulation of Vegetated Flows." ISH Journal of Hydraulic Engineering, Taylor and Francis, 13(2), 72-87.
- 48. Debnath, K, and Nikora, V. Elliott, A. H. (2007). "Stream bank erosion: in-situ flume tests." Journal of Irrigation and Drainage Engineering, ASCE, 133(3), 257-264, Impact factor: 1.086, Citation: 16
- 49. Debnath, K., Aberle, J., Nikora, V., Westrich, B., and Muste, M. (2007). "Erosion of cohesive sediments: resuspension, bed load, and erosion patterns from field experiments." Journal of Hydraulic Engineering, ASCE, 133(5), 508-520, Impact factor: 1.25, Citation: 39
- 50. Bhattacharya, A. K. and Debnath, K. (2002). Discussion on paper "Flow interaction of meandering river with floodplain." Journal of Hydraulic Engineering, ASCE, 128(2), 2002, 245 246, Impact factor:1.25.
- 51.Basu, P. K.,Bhattacharya, A. K, Debnath, K and Nandi, N. (2002). "Interbasin transfer of water for development in West Bengal perspective." Journal of the ASCE India Section,20(1), 2002, 12 18.
- 52. Dey, S., and Debnath, K. (2001). "Sediment pick-up on stream-wise sloping beds." Journal of Irrigation and Drainage Engineering, ASCE, 127(1), 39-43, Impact factor: 1.086, Citation: 31
- 53.Bhattacharya, A. K. and Debnath, K (2001). "A review of methods of reduction of local scour around bridge piers." Indian Highways Journal, September 2001.
- 54. Dey, S., and Debnath, K. (2000). "Influence of stream wise bed slope on sediment threshold under stream flow." Journal of Irrigation and Drainage Engineering, ASCE, 126(4), 555-563, Impact factor: 1.086, Citation: 29
- 55. Dey, S., DeySarker, H. K., and Debnath, K. (1999). "Sediment threshold under stream flow on horizontal and sloping beds." Journal of Engineering Mechanics, ASCE, 125(5), 545-553, Impact factor 1.173, Citation: 39
- 56.Bhattacharya, A. K. and Debnath, K. (1999) "Low-head hydro-electricity development." Journal of the River Research Institute, 26, 56 57.
- 57.Dipankar Chatterjee, PabitraHalder; "Magnetoconvective Transport in a Lid-Driven Square Enclosure with Two Rotating Circular Cylinders", Heat Transfer Engineering, 37(2):198–209, 2016. IF: 0.814, Citations: -
- 58.Dipankar Chatterjee, PabitraHalder;"MHD Mixed Convective Transport in a Square Enclosure with Two Rotating Circular Cylinders", Numerical Heat Transfer Part A, 65: 802–824, 2014. IF: 1.975, Citations: 9.
- 59.Dipankar Chatterjee, BittagopalMondal, PabitraHalder; "HydromagneticMixed Convective Transport in a Vertical Lid-Driven Cavity including a Heat Conducting Rotating Circular Cylinder", Numerical Heat Transfer Part A, 65: 48–65, 2014. IF: 1.975, Citations: 14.
- 60.PabitraHalder, Sudipta De, K.P. Sinhamahapatra, N. Singh; "Numerical Simulation of Shock-Vortex Interaction in Schardin's Problem", Shock Waves, 23: 495–504, 2013. IF: 0.885, Citations: 4.
- 61.Dipankar Chatterjee, PabitraHalder, SinchanMondal, SupratimBhattacharjee; "Magnetoconvective transport in a vertical lid-driven cavity including a heat conducting square cylinder with Joule heating", Numerical Heat Transfer Part A, 64: 1050-1071, 2013. IF: 1.975, Citations: 12.
- 62.Dipankar Chatterjee, BittagopalMondal, PabitraHalder; "Unsteady forced convection heat transfer over semicircular cylinder at low Reynolds numbers", Numerical Heat Transfer Part A, 63: 411-429, 2013. IF: 1.975, Citations: 10
- 63.PabitraHalder, K.P. Sinhamahapatra, N. Singh; "Numerical Investigations of Supersonic Wake Region of Wedge Using AUSM+ on Unstructured Grid", *International Journal of Applied Mathematics and Mechanics*, 7 (11): 46-68, 2011. IF: -, Citations: -.
- 64.PabitraHalder, K.P. Sinhamahapatra, N. Singh; "Type-VI and Type-V Shock-Shock Interactions on Double-Wedge Geometries Using *AUSM*+ on Unstructured Grid", *International Journal of Hypersonics*, 1 (4): 225-244, 2010. IF: -, Citations: -.

- 65. Chatterjee, S., Majumder, S., Roychowdhury, A., Pal, S., "Review: Problems with use of Trans-Tibial Prosthesis", Journal of Medical Imaging and Health Informatics, Vol. 6, No. 2, 2016, pp. 269–284, Impact Factor: 0.642, Citations: -.
- 66. Talukdar, R.G., Das, M., Majumder, S., Roychowdhury, A., "Optimization of Solid UHMWPE with porosity as an cervical disc implant", International Journal of Applied Engineering Research, Vol. 10, No. S11, 2015, pp. 10511-10515, Impact Factor: -, Citations: -.
- 67. Das, M., Talukdar, R.G., Bhowmik, K., Roy, S., Majumder, S., "Comparison of interface stress-strain analysis of molar teeth with solid and porous dental implant", International Journal of Applied Engineering Research, Vol. 10, No. S11, 2015, pp.10502-10506, Impact Factor: -, Citations: -.
- Biswas, J.K., Karmnakar, S.K., Majumder, S., Banerjee, P.S., Saha S., Roychowdhury, A., "Optimization of spinal implant screw for lower vertebra through finite element studies", Journal of Long-Term Effects of Medical Implants, Vol. 24, No. 2-3, 2014, pp. 99-108, Impact Factor: 0.2 (as per 1999), Citations: Nil.
- 69. Majumder, S.,Roychowdhury, A., Pal, S., "Hip fracture and anthropometric variations: Dominance among trochanteric soft tissue thickness, body height and body weight during sideways fall", Clinical Biomechanics, Vol. 28, No. 9-10, 2013, pp. 1034-1040, Impact Factor: 2.490, Citations: 8.
- Majumder, S.,Roychowdhury, A., Pal, S., "Effects of body configuration on pelvic injury in backward fall simulation using 3D finite element models of pelvis-femur-soft tissue complex", Journal of Biomechanics, Vol. 42, No. 10, 2009, pp. 1475-1482, Impact Factor: 2.751, Citations: 14.
- 71. Majumder, S.,Roychowdhury, A., Pal, S., "Finite element study of side impact on pelvis with car door padding", International Journal of Vehicle Safety, Vol. 3, No. 4, 2008, pp. 338–350, Impact Factor: Not available, Citations: 3.
- 72. Deb, A., Majumder, S.,Roychowdhury, A., "Biomechanical study of the lumbar spine with and without implant: A finite element approach", Journal of Long-Term Effects of Medical Implants, Vol. 18, No. 4, 2008, pp. 257-261, Impact Factor: 0.2 (as per 1999), Citations: 1.
- 73. Banerjee, T., Majumder, S., Chakraborty, J.K., "A three-dimensional finite element stress analysis of L4–L5 vertebra in a bending posture", International Journal of Vehicle Safety, Vol. 3, No. 2, 2008, pp. 182–193, Impact Factor: -, Citations: 1.
- Majumder, S.,Roychowdhury, A., Pal, S., "Effects of trochanteric soft tissue thickness and hip impact velocity on hip fracture in sideways fall through 3D finite element simulations", Journal of Biomechanics, Vol. 41, No. 13, 2008, pp. 2834–2842, Impact Factor 2.751, Citations: 55.
- Majumder, S., Roychowdhury, A., Pal, S., "Experimental validation of 3D finite element model of pelvisfemur-soft tissue complex under side impact loading". International Journal of Vehicle Safety, Vol. 3, No. 2, 2008, pp. 117–134, Impact Factor: -, Citations: 8.
- 76. Majumder, S.,Roychowdhury, A., Pal, S., "Three-dimensional finite element simulation of pelvic fracture during side impact with pelvic–femur–soft tissue complex", International Journal of Crashworthiness, Vol. 13, No. 3, 2008, pp. 313–329, Impact Factor: 0.569, Citations: 12.
- 77. Majumder, S.,Roychowdhury, A., Pal, S., "Simulation of hip fracture in sideways fall using a 3D finite element model of pelvis-femur-soft tissue complex with simplified representation of whole body", Medical Engineering & Physics, Vol. 29, No. 10, 2007, pp. 1167–1178, Impact Factor: 1.825, Citations: 78.
- Majumder, S., Roychowdhury, A., Pal, S., "Biomechanical analysis of human pelvis under musculo-skeletal load using 3D finite element method", International Journal of Applied Mechanics and Engineering, Vol. 10, No. 4, 2005, pp. 647–665, Impact Factor: -, Citations: Nil.
- 79. Majumder, S.,Roychowdhury, A., Pal, S., "An algorithm to calculate the components of all muscle forces during each phases of gait cycle, for the pelvic-femur complex", Journal of Mechanics in Medicine and Biology, Vol. 5, No. 4, 2005, pp. 539–548, Impact Factor: 0.731, Citations: 2.

- Majumder, S.,Roychowdhury, A., Pal, S., "Dynamic response of the pelvis under side impact load a threedimensional finite element approach", International Journal of Crashworthiness, Vol. 9, No. 1, 2004, pp. 89– 103, Impact Factor: 0.569, Citations: 21.
- 81. Chatterjee, S., Ghosh, U.B., Majumder, S., Roychowdhury, A., Pal, S., "Customization of design for hip implants", Indian Journal of Biomechanics, Vol. 4, No. 1, 2013, pp. 58–62, Impact Factor: Not available, Citations: Nil.
- 82. Biswas, J.K., Karmakar, S.K., Majumder, S., Roychowdhury, A., "A finite element study of spinal implant (pedicle screw) design for lumber (L3–L5) vertebra", Indian Journal of Biomechanics, Vol. 3, No. 1-2, 2012, pp. 50–60, Impact Factor: Not available, Citations: Nil.
- Sarkar, S., Majumder, S., Roychowdhury, A., "Response of human head under static and dynamic load using finite element method", Trends in Biomaterials and Artificial Organs, Vol. 17, No. 2, 2004, pp. 130–134, Impact Factor: 0.69, Citations: Nil.
- Majumder, S., Roychowdhury, A., Pal, S., "Variations of stress in pelvic bone during normal walking, considering all active muscles", Trends in Biomaterials and Artificial Organs, Vol. 17, No. 2, 2004, pp. 48–53, Impact Factor: 0.69, Citations: 17.
- 85. SintuSingha, K. P. Sinhamahapatra, S. K. Mukherjea, "Control of Vortex Shedding From a Bluff Body Using Imposed Magnetic Field", Journals of Fluids Engineering, Vol:129, 2007, Impact Factor: -, Citations: -.
- 86. Dalal, D. C., N. Dutta, and S. K. Mukherjea, "Unsteady Natural Convection of a Dusty Fluid in an infinite Rectangular Channe," International Journal of Heat and Mass Transfer, Vol. 41(3), pp 547 to 562, (1998), Impact Factor: -, Citations: -.
- 87. Layek, G. C., P. Niyogi, M. K. Maity and S. K. Mukherjea, "", Computational Fluid Dynamics JOURNAL, Vol. 5(3), pp 451 to 470, (1996), Impact Factor: -, Citations: -.
- Mukherjea, S. K. and G. Bandyopadhyay, "A Navier-Stokes Simulation of Vortex Shedding from Square Cylinder in Unconfined Domain," Journal of the Aeronautical Society of India, Vol. 44 (August – September), pp 209 to 213, (1992), Impact Factor: -, Citations: -.
- 89. Bhaumik ,S. and Das, P.K (2014), "Effect of Asymmetric Community Structures under Near-fault Ground Motion", International Journal of Advancements in Mechanical and Aeronautical Engineering (IJAMAE), Volume 1 : Issue 3, pp. 7-11
- 90.Das, P. K. and Dutta, S. C., (2002), "Effect of Strength and Stiffness Deterioration on Seismic Behaviour of R/C Asymmetric Buildings," International Journal of Applied Mechanics and Engineering, Vol. 7, No. 2, pp. 527-564. Citations 4.
- 91.Dutta, S. C. and Das, P. K., (2002), "Inelastic Seismic Response of Code-Designed Reinforced Concrete Asymmetric Buildings with Strength Degradation," Engineering Structures, Vol. 24, No. 10, pp. 1295-1314. Impact Factor 2.152, Citations 14.
- 92.Dutta, S. C. and Das, P. K., (2002), "Validity and Applicability of Two Simple Hysteresis Models to Assess Progressive Seismic Damage in R/C Asymmetric Buildings," Journal of Sound and Vibration, Vol. 257, No. 4, pp. 753-777. Impact Factor 2.223, Citations 22.
- 93.M. C. Manna, A. K. Bhattacharya, S. Choudhury and S. C. Maji, 2003, Groundwater flow beneath a sheetpile analyzed using six-noded triangular finite elements, Journal of The Institution of Engineers (India), Vol.84, pp.121 – 129.
- 94.M. C. Manna, 2004, A new high-order triangular plate element, International Journal of Applied Mechanics and Engineering, Vol. 9(2), pp.361 382.
- 95.M. C. Manna, 2005, Free vibration analysis of isotropic rectangular plates using a high-order triangular finite element with shear, Journal of Sound and Vibration, Vol. 281(1-2), pp.235 259.

- 96.M. C. Manna, A. H. Sheikh and R. Bhattacharyya, 2006, A compressible finite element model for hyperelastic members under different modes of deformation, Structural Engineering and Mechanics, An International Journal, Vol. 24(2), pp.227 - 245.
- 97.M. C. Manna, 2006, A sub-parametric shear deformable element for free vibration analysis of thick/thin rectangular plates with tapered thickness, International Journal of Applied Mechanics and Engineering, Vol. 11(4), pp.901 913.
- 98.M. C. Manna, A. H. Sheikh and R. Bhattacharyya, 2009, Static analysis of rubber components with piezoelectric patches using nonlinear finite element, Smart Structures and Systems, An International Journal, Vol. 5(1), pp. 23 42.
- 99.M. C. Manna, R. Bhattacharyya and A. H. Sheikh, 2010, Nonlinear dynamic response and its control of rubber components with piezoelectric patches/layers using finite element method, Smart Structures and Systems, An International Journal, Vol. 6(8), pp. 889 - 903.
- 100.M. C. Manna, 2012, Free vibration of tapered isotropic rectangular plates, Journal of Vibration and Control, Vol. 18(1), pp. 76 91.
- 101 M. C. Manna, 2014, Free vibration analysis of rectangular plates using a new triangular shear flexible finite element, International Journal of Emerging Engineering Research and Technology, Vol. 2(5), pp. 89 98.
- 102.Haldar, S., Sarkar, S and Sheikh, A. H. '*Finite element analysis of composite folded plates with elastically restrained edges 'International Journal of Reinforced Plastics and Composites*, V-18, No. 7, 1999, 626-641. Impact factor: 1.503, Citation:-5.
- 103. Sheikh, A. H., Topdar, P. and Haldar, S. "An appropriate FE model for through-thickness variation of displacement and potential in thin/thick smart laminates", *Composite Structures*, V-51, 2001, 401-409. Impact factor: -3.318, Citation:-
- 104. Sheikh, A. H., Haldar, S. and Sengupta, D. "Free vibration analysis of composite plates of different shapes using a high precision element" *Composite Structures*, Vol.- 55, 2002, 329-336. Impact factor: 3.318, Citation:-25
- 105. Sheikh, A. H., Haldar, S. and Sengupta, D. "A high precision shear flexible element for vibration of plates in different situations", *Journal of Sound and Vibration*, Vol. 253, No. 2, 2002, 329-345. Impact factor: -1.857, Citation:- 8.
- 106. Manna, M. C., Haldar, S. and Bhattacharya, A. K. "Bending analysis of isotropic plates using a sixteen noded sub-parametric element", *International Journal of Applied Mechanics and Engineering*, Vol. 7, No. 4, 2002, 1271-1282. Impact factor –1.624, Citation:-1
- 107. Haldar, S., Sengupta, D. and Sheikh, A. H. "A high precision shell element with shear deformation for the analysis of isotropic and composite shells",*International Journal for Computational Engineering Science*, Vol.3, No. 3, 2002, 277-290, Impact factor:-. Citation:-1.
- 108. Haldar, S., Manna, M. C. and Sheikh, A. H. 'Static analysis of isotropic thick/thin skew plates by finite element method'. *International Journal of Applied Mechanics and Engineering*, V- 8(2), 245-254, 2003. Impact factor –1.624, Citation:-
- 109. Haldar, S., Sengupta, D and Sheikh, A.H. "Free vibration analysis of composite right angle triangular plate using a shear flexible element", *International Journal of Reinforced Plastics and Composites*, Vol. 22, No. 3, 2003, 229-255. Impact factor –1.503, Citation:-6
- 110. Manna, M. C., Haldar, S and Sheikh, A. H. "Free vibration analysis of isotropic thick/thin plates using a subparametric shear deformable element", *International Journal of Applied Mechanics and Engineering*, Vol. 8, No. 3, 2003, 441-448. Impact factor –1.624, Citation:-

- 111. Haldar, S. and Manna, M. C. "A high precision shear deformation element for free vibration of thick/thin composite trapezoidal plates", *Journal of steel and composite Structures*, Vol.3, No. 3, 2003, 213-229. Impact factor –0.964, Citation:- 3
- 112. Sheikh, A. H., Haldar, S. andSengupta, D. "Free flexural vibration of composite plates in different situations using a high precision triangular element", *Journal of Vibration and Control*, Vol.10, 2004, 371-384. Impact factor: 4.355, Citation:-7.
- 113. Halder, S.Das, P. and Manna, M. C. "Bending analysis of thick/thin triangular plates by finite element method", *Structural Engineering and Mechanics*, Vol.8, No. 1, 2004, 79-90. Impactfactor: 0.927, Citation:-1.
- 114. Sheikh, A. H., Haldar, S. and Sengupta, D. "A shear flexible triangular element for analysis of composite shells", *Journal of Shock and Vibration*, Vol.11, No. 5-6, 2004, 585-596. Impact factor: 0.608, Citation:-8.
- 115. Haldar, S. and Sheikh, A. H. "Free vibration analysis of isotropic and composite folded plates using a shear flexible element", *Finite Elements in Analysis and Design*, Vol.42, 2005, 208-226. Impact factor: 2.017, Citation:-12.
- 116. Pandit, M. K., Haldar, S. and Mukhopadhyay, M. "Free vibration analysis of laminated composite rectangular plate using finite element method", *International Journal of Reinforced Plastics and Composites*, Vol.26, No. 1, 2007, 69-80. Impact factor: 1.503, Citation:-21.
- 117. Halder, S. "Free vibration of composite skewed cylindrical shell panel by finite element method", *Journal of Sound and Vibration*, Vol.311, No. 1-2, 2008, 9-19. Impact factor: 1.857, Citation:-14.
- 118. Haldar, S. and Majumder, A. and Manna, M. C. "Bending of skew cylindrical shell panel", Int. Journal of Computer Application. Article 17, No. 8, 2010., Impact factor:-, Citation:-
- 119. Haldar, S. and Sheikh, A. H. "Bending analysis of composite folded plates by finite element method", Finite Element in Analysis and Design, Vol. 47, 2001, 477-485. Impact factor –2.017, Citation:-14.
- 120. Haldar, S. and Majumder, A. "Free vibration thick/thin skewed tapered cylindrical shell panels", Int. J. of Applied mechanics and engineering, vol. 16, no.- 3, 2011. Impact factor -1.624, Citation:-
- 121. Kalita, K., Banerjee, A and Halder, S. "An analysis to mitigate induced principal stresses in orthotropic plates", International Journal of Engineering Research & Technology. Vol. 6, No. 3. 2013, ISSN 2319-3182, Impact factor:-, Citation :-.
- 122. Kalita, K., Shine, D. and Haldar, S. "Analysis on transverse bending of rectangular plates", Materials Today; Proceedings, Vol. 2, No. 4, 2015, 2146-2154, Impact factor:- Citation:-.
- 123. Dey, P., Haldar, S., Sengupta, D and Sheikh, A. H. "An efficient plate element for the vibration of composite plates", Applied Mathematical Modelling. Impact factor –2.251, Citation:-
- 124. Roy S., Das M., Khutia N., Roy Chowdhury A., Bandopadhyay Amit, , Understanding compressive deformation behavior of porous Ti using Finite Element Analysis, Materials Science and Engineering C. <u>Elsevier</u>, Accepted For Publication, 2016, Impact Factor: 3.088.
- 125. Khutia N., Dey P. P., Hassan T., An improved nonproportional cyclic plasticity model for multiaxial low-cycle fatigue and ratcheting responses of 304 stainless steel. Mechanics of Materials. <u>Elsevier</u>, Volume 91, Part 1, 2015, Pages 12–25. Impact Factor: 2.598, Citations: 0 .

- 126. Basantia S. K., Md Abu Bakkar, Khutia N., Das D., Simulation of LCF Characteristics of AA6063 Al Alloy under Different Aging Conditions", Materials TodayProceedings, <u>Elsevier</u>, Volume 2, Issues 4–5, 2015, Pages 2226–2235. Impact Factor: 6.025, Citations: 0 .
- 127. Roy S., Panda D., Khutia N., RoyChowdhury A., Pore geometry optimization of titanium (Ti6Al4V) alloy, for its application in the fabrication of customized hip implants, International Journal of Biomaterials, <u>Hindawi</u> <u>Publishing Corporation</u>, Volume 2014, Article ID 313975, Volume 12, 2014, Pages 1-13. Impact Factor: 0 (Scopus indexed), Citations: 0
- 128. Khutia N., Dey P. P., Sivaprasad S., Tarafder S., Development of new cyclic plasticity model for 304LN stainless steel through simulation and experimental investigation. Mechanics of Materials, <u>Elsevier</u>, Volume 78, 2014, Pages 85-101. Impact Factor: 2.598, Citations: 1
- 129. Khutia N., and Dey, P.P., 'Material parameter optimisation of Ohno-Wang kinematic hardening model using multi objective genetic algorithm', International Journal Computational Materials Science and Surface Engineering, Inderscience, Vol. 6, No. 1, 2014, Pages 50–74, Impact Factor: 0 (Scopus indexed), Citations: 0
- 130. Khutia N., Dey P.P., Paul Surajit, Tarafder S., Development of Non Masing Characteristic Model for LCF and Ratcheting Fatigue Simulation of SA333 C-Mn Steel, Mechanics of Materials, <u>Elsevier</u>, Vol. 65, 2013, Pages: 88-102, Impact Factor: 2.598, Citations: 6
- 131. Haldar, S. and Roy, D. "Wear behavior of different mating pairs at elevated and ambient temperature", *Journal of Institute of Engineers* (India), Vol-77, 1996, Impact factor:-, Citation:-.
- 132. Haldar, S., Sengupta, D. and Sheikh, A. H. "A high precision shear deformable element for free vibration analysis of isotropic trapezoidal plate", *Journal of Institute of Engineers* (India), Vol-83, 2003, 259-266, Impact factor:-, Citation:-.
- 133. Manna, M.C., Haldar, S and Munjal, M.L. 'Time-domain analtsis of extended-tube expansion chambermufflers by means of method of characteristics', *Journal of Institute of Engineers* (India), Vol-83, 2002, 28-33, Impact factor:-, Citation:-.
- 134. Haldar, S. and Sengupta, D. 'Bending of cylindrical shell panels', Journal of Technology.
- 135. Kalita, K., and Halder, S. "Static Analysis of Transversely Loaded Isotropic and Orthotropic Plates with Central Cutout." *Journal of The Institution of Engineers (India): Series C*: 1-12, 2015, Impact factor:-, Citation:-.
- 136. Srijan Bhattacharya, RitwikChattaraj, Arindam Patra, Mallar Das, Bikash Bepari and Subhasis Bhaumik, "Simultaneous Parametric Optimization of IPMC Actuator for Compliant Gripper", International Journal of Precision Engineering and Manufacturing, International Journal of Springer, Vol. 16, No. 11, October 2015, pp. 312–325. Impact Factor: 1.205, Citations: 0
- 137. Srijan Bhattacharya, Bikash Bepari and Subhasis Bhaumik, "IPMC Actuated Compliant Mechanism Based Multi-Functional Multi-Finger Micro-Gripper", Mechanics based Design of Structures and Machines, International Journal of Taylor & Francis, Vol. 42, Issue 03, May 20, 2014, pp. 312–325. Impact Factor: 0.842, Citations: 4

Conferences:

1. Roy, A. and Roy, R., "Seismic Behaviour of RC Elevated Water Tanks with Shaft Staggings: Effect of biaxial interaction and Ground Motion Characteristics", Structural Engineering Convention, Indian Institute of Technology, Delhi, India, Dec. 22-24, 2014, Citation: 1.

- 2. Roy, R., Ghosh, D. and Bhattacharya, G., "Estimating instability of slopes during earthquake: A simple framework", Proc. of Indian Geotechnical Conference, Indian Institute of Technology, Roorkee, India, Dec. 22-24, 2013, Citation: 1.
- 3. Mahato, S., Chakraborty, P. and Roy, R., "Uncertainty of Code-torsional Provisions to Mitigate Seismic Hazards of Buildings with Setback", Proc. of International Symposium on Engineering under Uncertainty: Safety Assessment and Management (ISEUSAM), 2012, pp. 629 642, Citation: 1.
- 4. Roy, R. and Dutta, S. C., "Effect of Soil-Structure Interaction on Seismic Torsional Behaviour of Building Frames", Proc. of Second International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM 2001), December 27-30, Paper No. 24, Indian Institute of Technology, Kharagpur, India, 2001, Citation: 5.
- Roy, R. and Dutta, S. C., "Effect of Soil-Structure Interaction on Dynamic Behaviour of Building Frames on Grid Foundations", Proc. of Structural Engineering Convention (SEC 2001), An International Meet, Indian Institute of Technology, Roorkee, India, 2001, pp. 694-703, Citation: 9.
- 6. Aditya Bandopadhyay, Uddipta Ghosh, Debashis Pal, KaustavChaudhury and Suman Chakraborty, "*Electrokinetic Maneuvering of Bubble-driven Inertial Micro-pumping Systems*" Proceedings of the 22thNational and 11th International ISHMT-ASME Heat and Mass Transfer Conference, Dec 28-31, 2013, IIT Kharagpur, India
- Debashis Pal, Supriya Sarkar, "Unsteady Rotational Behaviour of Two Immiscible Liquids Contained in a Vertical Cylinder: A Numerical Study Using VOF Model" 31st National Conference on Fluid Mechanics and Fluid Power, Dec 16-18, 2004, Jadavpur University, Kolkata, India, Vol. II, pp. 549-557.
- 8. Singh SK and Debnath K (2015). "Turbulence over rough-bed using double averaged Navier-Stokes equations". 20th International conference on Hydraulics, water Resources and River engineering, IIT Roorkee, 17-19 Dec., 2015.
- 9. Barman K. and Debnath K. (2015). "Turbulence flow characteristics over hemispherical obstacles in the presence of surface wave". 20th International conference on Hydraulics, water Resources and River engineering, IIT Roorkee, 17-19 Dec., 2015.
- 10.Singh SK and Debnath K (2014). "Laboratory investigation of turbulent flow structure over a submerged cubic obstacle". International conference on Fluid Mechanics and Fluid Power (FMFP), IIT Kanpur, pp. FMFP 14-B-681/23, 12-14 Dec., 2014.
- 11.Singh SK and Debnath K (2014). "Structure of turbulence flow dynamics over a submerged cube". International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM), IIT Kharagpur, pp. 29-31, 29-32 Dec., 2014.
- 12.Barman K and Debnath K (2014). "Effect of Submergence around hemispherical obstacle". International conference on Fluid Mechanics and Fluid Power (FMFP), IIT Kanpur, Dec., 2014.
- 13.Barman K and Debnath K (2014) "Turbulence characteristics in the wake region of single and double in-line hemispherical obstacles in the presence of surface waves". International Conference of Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM), 29-31 Dec. 2014.
- 14.Debnath, K., and Chaudhury, S. Manik, M., K. (2013). "Experimental Study on Local Scour around Vertical Wall Abutment in Clay-Sand Mixed Cohesive Sediment." 58th Congress of the Indian Society of Theoretical and Applied Mechanics, 18-21st December, BESU, Shibpur
- 15.Dutta, I. and Debnath , K. (2013)Flow Within Channel Contractions." 58th Congress of the Indian Society of Theoretical and Applied Mechanics, 18-21st December, BESU, Shibpur.
- 16.Manik, M. K. and Debnath, K. (2013). "Scour within long contractions within channels in cohesive sediment bed." 58th Congress of the Indian Society of Theoretical and Applied Mechanics, 18-21st December, BESU, Shibpur

- 17.Singh, S. K. and Debnath, K. (2013). Study of Turbulence Flow Characteristics over Surface Mounted Cubic Obstacles in a Tandem. arrangement" 58th Congress of the Indian Society of Theoretical and Applied Mechanics, 18-21st December, BESU, Shibpur.
- 18.Burman, K. and Debnath, K. (2013). "Turbulence Characteristics in the Wake Region of Single and Double inline Hemispherical Obstacles" 58th Congress of the Indian Society of Theoretical and Applied Mechanics, 18-21st December, BESU, Shibpur.
- 19.Roy, S. and Debnath, K. (2013). "Turbulent statics of combined wave current flow over a plane bed" 58th Congress of the Indian Society of Theoretical and Applied Mechanics, 18-21st December, BESU, Shibpur.
- 20.Debnath, K. and Nikora, V. (2010). "On threshold of cohesive sediment erosion." To appear in the proceedings of the Indo-US Bilateral Workshop on "Sedimentation, Erosion, Flooding, and Ecological Health of Rivers". ISI, Kolkata, 1-3 November 2010.
- 21.Chaudhury, S., Debnath, K. (2010). "Observations on Scouring Processes within Evolving Scour Hole around Cylinders Embedded in Clay-Sand Mixed Cohesive Sediments" To appear in the proceedings of the Indo-US Bilateral Workshop on "Sedimentation, Erosion, Flooding, and Ecological Health of Rivers", ISI, Kolkara 1-3 November 2010.
- 22.Debnath, K., and Chaudhury, S. Mukhopadhyay, B. P. (2010) "Volume of Scour around Circular Cylinder in Clay-Sand Mixed Beds" Proceedings of the HYDRO-2009, 2009, Indian Society for Hydraulics, 7-14.
- 23.Plew, D., Debnath, K., Aberle, J., Nikora, V., Cooper, G. (2007). "In situ flume for studying cohesive and noncohesive sediment erosion." XXXII IAHR Congress, Venice, Italy, Papers on CD-ROM.
- 24.Nikora, V., Learned, S., Debnath, K., Cooper, G., Reid, M. and Nikora, N., (2006). "Effects of aquatic and bank vegetation on hydraulic performance of small urban streams" Proceedings of River Flow 2006, 6-8 September 2006, Lisbon, Portugal.
- 25.Debnath, K. and Nikora, V. (2006). "A new instrument for measurement of cohesive sediment erosion, resuspension and bed load from field experiments". Proceedings of International Conference on Applications of Fluid Mechanics in Industry and Environment, August 28-31, 2006, Kolkata, India.
- 26.Debnath, K, Nikora, V., Grace, C. (2004). "Cohesive sediment erosion in Canturbury streams" In: Book of Abstracts of the New Zealand Hydrological Society Symposium "Hydrology and the Community", Queenstown, New Zealand, 43-44.
- 27.Grace, C., Debnath, K., Nikora, V. I.; Bulleid, J., De Lima, S., Aberle, J., Humphreys, D. (2003) New NIWA in-situ sediment flume. In: Book of Abstracts of the New Zealand Hydrological Society Symposium "Hydrology and the Community", Taupo, New Zealand, 43-44.
- 28.Bhattacharya, A. K. and Debnath, K. (2002). "A review of turbulence and its modelling" BSME ASME International Conference on Thermal Engineering, Dhaka, Bangladesh.
- 29.Dey, S., and Debnath, K. (2002). "An overview on sediment threshold." Proc International Conference on Advances in Civil Engineering, IIT Khatragpur, 437-445.
- 30.Dey, S., Dey Sarkar, H. K., and Debnath, K. (1999). "Sediment threshold on stream-wise bed slopes." Proc. 26th National Conference on Fluid Mech. and Fluid Power, IIT, Kharagpur, 255-262.
- 31.Rana, M., Biswas, J.K., Majumder, S., Karmakar, S.K., Roychowdhury, A., "Effect of ligaments on range of motion at lumber spine for natural and implanted condition : A finite element study", International Conference on Advanced Materials and Energy Technology, Indian Institute of Engineering Science and Technology, Shibpur, 17–19 December 2014, pp. 80, Citations: Nil.
- 32. Pradhan, R., Roy, S., Majumder, S., Roychowdhury, A., "Finite element analysis of hard coated surface on UHMWPE based cervical spine implant", International Conference on Advanced Materials and Energy Technology, Indian Institute of Engineering Science and Technology, Shibpur, 17–19 December 2014, pp. 79, Citations: Nil.

- 33. Chatterjee, S., Majumder, S., Roychowdhury, A., "Homogenization of interfacial strain profile hip –implanted femur by lowering effective stiffness of the implant material", International Conference on Advanced Materials and Energy Technology, Indian Institute of Engineering Science and Technology, Shibpur, 17–19 December 2014, pp. 72, Citations: Nil.
- 34. Sahoo, A., Majumder, S., Roychowdhury, A., "Dynamic response of knee-thigh-hip complex in seated posture during frontal impact", 58th Congress of Indian Society of Theoretical and Applied Mechanics (an International Conference), Bengal Engineering and Science University, Shibpur, 18–21 December 2013, pp. 11, Citations: Nil.
- 35. Chatterjee, S., Majumder, S., Mondal, P., Patwari, M., Saha, B., Bhattacharyya, B., Roychoudhury, A., "Effective stiffness of customized hip implants: Incorporation of cavity", 58th Congress of Indian Society of Theoretical and Applied Mechanics (an International Conference), Bengal Engineering and Science University, Shibpur, 18–21 December 2013, pp. 9, Citations: Nil.
- 36. Dey, S., Biswas, J.K., Chatterjee, S., Majumder, S., Roychoudhury, A., "Design & simulation of lumber artificial intervertibral disc", International Conference on Advances in Mechanical Engineering and its Interdisciplinary Areas, College of Engineering and Management, Kolaghat, 27–28 December 2012, pp. 414– 420, Citations: Nil.
- Roychowdhury, A., Sahoo, A., Majumder, S., Kumar, S., Saha, S., "Experimental studies of frontal impact on human pelvis", 6th World Congress on Biomechanics, National University of Singapore, Singapore, 1–6 Aug 2010, pp. 384, Citations: Nil.
- Majumder, S., Roychowdhury, A., Pal, S., "Studies on hip fracture during sideways fall with anthropometric variations using 3D finite element simulations", 6th World Congress on Biomechanics, National University of Singapore, Singapore, 1–6 Aug 2010, pp. 297, Citations: Nil.
- Majumder, S., Roychowdhury, A., Pal, S., "Effects of variation of impact energy on pelvis-femur-soft tissue complex: 3D finite element simulations of automotive side impacts", 6th World Congress on Biomechanics, National University of Singapore, Singapore, 1–6 Aug 2010, pp. 297 Citations: Nil.
- 40. Ghosh, S., Majumder, S., Pal, S., "Development of a dynamometer to measure the punching force for boxers and its validation with CT-based FE analysis of the hand-fist complex", 6th World Congress on Biomechanics, National University of Singapore, Singapore, 1–6 Aug 2010, pp. 216 & IFMBE-2010 Proceedings, Vol. 31, 2010, pp. 167–170, Citations: Nil.
- 41. Majumder, S., Roychowdhury, A., Pal, S., "Effectiveness of a foam type hip pad in reduction of hip fracture: a 3D finite element study", 16th Congress of the European Society of Biomechanics, Switzerland & Journal of Biomechanics, Vol. 41, 6–9 July 2008, pp. S453, Citations: 1.
- 42. Majumder, S., Roychowdhury, A., Pal, S., "Finite element of pelvis during a backward fall", 5th World Congress on Biomechanics, Germany & Journal of Biomechanics, Vol. 39, 29 July 4 August 2006, pp. S536, Citations:3.
- 43. Daripa, R., Majumder, S., Roychowdhury, A. "Finite element analysis of total elbow prosthesis", 5th Combined Meeting of Orthopedic Research Societies of the Canada, USA, Japan and Europe, Alberta, Canada, 10–13 October 2004, Poster No. 193, Citations: Nil.
- 44. Daripa, R., Majumder S., Roychowdhury, A., "Dynamic analysis of artificial elbow joint with finite element method", 5th Triennial International Hand & Wrist Biomechanics Symposium, New York, 7 September 2004, Citations: Nil.
- 45. Majumder, S., Roychowdhury, A., Pal, S., "A finite element study on the behavior of human pelvis under impact through car door", 1st International Conference on ESAR (Expert Symposium on Accident Research), Hannover Medical School, Germany, 3–4 September 2004, pp. 196-203, Citations: 1.
- 46. Majumder, S., Sarkar, S., Roychowdhury, A., Pal, S., Chatterjee, D., "Reconstruction of 3D images from CT scans for realistic finite element analysis", 2nd International Conference on Medical Diagonstic Techniques and

Procedures, IIT, Chennai, 1–3 April 2004, pp. 21 & Advances In Medical Diagnostic Techniques and Procedures, pp. 169–174, Citations: Nil.

- 47. Mukherjea, S.K., Ghosh, S. and Datta, B.N. (2014), Study of the Effect of Tangential Point Blowing on the Incompressible Boundary Layer Flow Around a Circular Cylinder, ASME 2014 conference held in Montreal, Canada in November 2014, Citations: -
- 48. Mukherjea, S.K. and Pande, B., Aerodynamic Simulation of Evacuated Tube Transport Trains with Suction at Tail, ASME 2014 conference held in Montreal, Canada in November 2014, Citations: -
- 49. Mukherjea, S.K. and SreejaBibin., Numerical Investigation of Aerodynamic Drag on Vacuum Tube Highspeed Train, ASME 2013 conference held in San Diego, California, USA in November 2013, Citations: -.
- 50. Mukherjea, S.K., Ghosh, S. and Datta, B.N., "Numerical Study of the Flow in the Wake of an Impulsively Started Rotating and Translating Circular Cylinder" ASME 2010 conference held in Vancouver, Canada, November 2010, Impact Factor: -, Citations: -
- 51.S. K. Ghosh, S. K. Mukherjea, B. N. Dutta, "Stability Analysis of Incompressible Viscous Flow Past A Rotating Infinite Circular Cylinder," 31st National Conference on Fluid Mechanics and Fluid Power, Jadavpur University, Kolkata, pp 515 – 524 (2004), Citations: -
- 52.Mukherjea, S. K. and G. Bandyopadhyay, "Separated Flow about a wedge," The Aeronautical Journal of the Royal Aeronautical Society, Vol. 94(936), pp196 to 202, (1990), Citations: -.
- 53. Mukherjea, S. K. and G. Bandyopadhyay, "Separated Flow about Bluff Bodies," 3rd National Conference on Aerodynamics, IIT, Bombay, November, pp C1-1 to C1-13, (1987), Citations: -.
- Roy, G. and Das, P.K. (2016), "Response of R/C Asymmetric Rectangular Community Structures under Near Fault Ground Motion", Paper No.: 1-IC-1438, International Conference on Recent Trends in Engineering and Material Sciences (ICEMS – 2016), March 17-19, Jaipur national University, Jaipur, India.
- Atha, S. and Das, P.K. (2016), "Behaviour of R/C Asymmetric Non Square Idealized Structures under Near Fault Ground Motion", Paper No.: 1-IC-1444, International Conference on Recent Trends in Engineering and Material Sciences (ICEMS – 2016), March 17-19, Jaipur national University, Jaipur, India.
- 56. Bhaumik, S. and Das, P. K. (2014) "Response of R/C Asymmetric Community Structures Under Near-Fault Motion", Proc. of Structural Engineering Convention (SEC 2014), An International Meet, I.I.T. Delhi, Advances in Structural Engineering, Dynamics, Volume Two, pp. 955-962.
- Paul, P., Das, P. K. and Sarkar, P. (2014) "Studies on Identifying Critical Joints in RC Framed Building Subjected to Seismic Loading", Proc. of Structural Engineering Convention (SEC 2014), An International Meet, I.I.T. Delhi, Advances in Structural Engineering, Dynamics, Volume Two, pp. 977-988.
- 58. Bhaumik, S. and Das, P. K. (2013), "Response of Idealized R/C Asymmetric Structural Systems under Near-fault Ground Motion" Paper no.: *58-istam-sm-fp-43*, 58TH Congress of The Indian Society of Theoretical and Applied Mechanics (ISTAM), An International Meet, December 18-21, Bengal Engineering and Science University, Shibpur, West-Bengal, India.
- 59. Das, P. K., Chakroborty, S. and Roy, R. (2010). "Seismic Behaviour of Torsionally Unbalanced Structures: A Unified Approach", Proc. of Int. Conf. of Challenges and Applications of Mathematics in Science and Technology (CAMIST), NIT, Rourkela, Orissa.
- 60. Roy, R., Das, P. K., Chowdhury, R., and Dutta, S. C. (2004). "Adequacy of Existing Seismic Torsional Provisions: A Critical Review with Recommendations", Proc. of World Congress on Natural Disaster Mitigation, New Delhi, India, pp. 337-347.
- 61. Das, P. K. and Dutta, S. C., (2003), "Inelastic Seismic Behaviour of R/C Structures with Bi-directional Asymmetry under Near-fault Motion", Proc. of Structural Engineering Convention (SEC 2003), An International Meet, I.I.T. Kharagpur, INDIA. 475-483.

- 62. Das, P. K. and Dutta, S. C., (2002), "Speciality in Seismic Behaviour of Reinforced Concrete Structures with Bi-Directional Asymmetry," Proceedings of National Seminar on Role of IT in Fire and Disaster Management, Indore, India. pp. 69-79.
- 63. Das, P. K. and Dutta, S. C., (2002), "Inelastic Behaviour of Bi-Directionally Eccentric Street-Corner Buildings under Spectrum Consistent Seismic Excitation," Proceedings of Recent Challenges in Civil Engineering (RCCE-2002), Hyderabad, India, pp. 245-255.
- 64. Das, P. K. and Dutta, S. C., (2002), "Seismic Vulnerability of Low-rise Asymmetric Buildings due to Degradation of R/C Structural Elements', Proceedings of Twelfth Symposium on Earthquake Engineering, Roorkee, India, pp. 1298-1306.
- 65. Das, P. K. and Dutta, S. C., (2002), "Seismic Behaviour of Code Designed Bi-directionally Asymmetric System," Proceedings of National Seminar on Multisectorial Role of Architects and Engineers for Earthquake Disaster, Indore, India, pp. 117-128.
- 66. Das, P. K. and Dutta, S. C. (2001), "Seismic Behaviour of Bi-directionally Asymmetric Structures," Proceedings of Structural Engineering Convention (SEC 2001) An International Meet, Roorkee, India. pp. 704-713.
- 67. Das, P. K. and Dutta, S. C. (2001), "Simplified Hysteresis Models to Recognize Progressive Damage of R/C Asymmetric Buildings under Seismic Torsion," Proceedings of the National Symposium on Advances in Structural Dynamics and Design (ASDD), Chennai, India. pp. 219-227.
- 68. Das, P. K. and Dutta, S. C. (2000), "Controlling Deterioration of RC Asymmetric Buildings under Seismic Loadings," Proceedings of ICI-Asian Conference on Ecstasy in Concrete, Bangalore, India. pp. 295-303.
- 69. S. Maji, S. Mondal, A. K. Bhattacharya, M. C. Manna and S. Chaudhury, 2002, Finite element analysis of flow under a sheet pile, Proceedings of International Conference on Water Resources in Arid Regions held at Kuwait, pp.145 154.
- 70. Haldar, S., Sengupta, D and Sheikh, A. H."A high precision shear flexible locking free element for the analysis of plates of different shapes", *Structural Engineering Convention, An International Meet*, held in IIT, Bombay, January, 2000.
- 71. Haldar, S., Sengupta, D and Sheikh, A. H.. "Flexural vibration of thick-thin plates using a high precision triangular mindlin plate element free from locking", *International Conference on Mathematical Modelling*, held in Roorkee, January, 2001
- 72. Haldar, S., Sengupta, D and Sheikh, A. H. "Free vibration analysis of cylindrical shell panels by finite element method", *Structural Engineering Convention, An International Meet*, held in Roorkee, Oct. 2001.
- 73. Haldar, S. and Manna, M. C. "Static analysis of isotropic thick/thin plates by finite element method", *Indian Society for Theoretical and Applied Mechanics*, 2001, An International Meet, held in REC Hamirpur, Dec. 2001.
- 74. Manna, M. C. and Haldar, S. "Free vibration analysis of composite thick/thin plates by finite element method", *Indian Society for Theoretical and Applied Mechanics, 2001, An International Meet*, held in REC Hamirpur, Dec. 2001.
- 75. Haldar, S., Manna, M. C and Sheikh, A. H. "Bending analysis of thick/thin triangular plates by finite element method", *Ship and Ocean Technology, An International Meet*, held in IIT, Kharagpur, Dec. 2002.
- 76. Haldar, S., Manna, M. C and Sheikh, A. H. "Bending analysis of thick/thin triangular plates by finite element method", *Indian Society for Theoretical and Applied Mechanics, An International Meet*, held in IIT, Gwahati, Dec. 2002.

- 77. Haldar, S., Manna, M. C and Sheikh, A. H. "Vibration of isotropic thick/thin rectangular plates with tapered thickness using a sub-parametric shear deformable element", *Indian Society for Theoretical and Applied Mechanics, An International Meet*, held in IIT, Gwahati, Dec. 2002.
- Haldar, S., Bhaduri, S and Manna, M. C. "Finite element analysis of mechanical and thermally loaded plane trusses". 2nd. BSME-ASME International Conference on Thermal Engineering, held in Bangladesh University of Engineering and Technology from 2-4 January, 2003.
- Haldar, S. "Free vibration analysis of thick/thin square plate by finite element method", 4th.International Mechanical Engineering Conference, held in Bangladesh University of Engineering and Technology from 29-31 Dec. 2004.
- 80. Haldar, S. "Analysis of plane trusses subjected to mechanical and thermal loading", Indian Society for Theoretical and Applied Mechanics, 2003, held in BIT, Mesra.
- 81. Haldar, S. and Sengupta, D. "Free vibration of cylindrical shell panel by finite element method", Indian Society for Theoretical and Applied Mechanics, 2006, held in Andhra Engineering College of University, Vishakapatnam.
- 82. Pandit, M. K., Manna, M. C and Haldar, S. "Free vibration analysis of isotropic and composite plates using finite element method", 8th. International conference on vibration problem, 2007, held in Bengal Engineering and Science University, Shibpur.
- Majumder, A., Haldar,S and Sengupta, D. "Free VIbration of Composite Skewed Cylindrical Shell Panel", Proceedings of 53rd Congress ISTAM, University College of Engineering, Osmania University, Hyderabad, December 27-30, 2008.
- 84. Majumder, A, and Haldar, S, "Free VIbration of Laminated Composite Skewed Spherical Shell Panel By Finite Element Method", Proceedings of International Conference on Vibration Problems, Centre for Theoritical Studies, IIT Kharagpur, India, January 19-22, 2009.
- 85. Kalita, K., Dutta, A and Haldar, S. "Stress concentration factor convergence study of a thin plate", 58th. Congress of ISTAM, Bengal Engineering and Science University, Shibpur, December 18-21, 2013.
- 86. Mandal, A. and Haldar, S. "Free vibration analysis of shell panels by finite element method", 58th. Congress of ISTAM, Bengal Engineering and Science University, Shibpur, December 18-21, 2013.
- 87. Kalita, K and Haldar, S. "Stress analysis of cutout plate", 58th. Congress of ISTAM, Bengal Engineering and Science University, Shibpur, December 18-21, 2013.
- 88. Mahure, K., Barman, H and Haldar, S. "Free Vibration of Rectangular Composite Laminate Plate with Concentrated Mass At Centre by Finite Element Method". 60th. Congress of ISTAM, held on Malaviya National Institute of Technology, Rajasthan, 2015.
- 89. Haldar, S and Bhduri, S. "Vibration of orthotropic triangular plates using a high precision element", National Symposium on Advances in Structural Dynamics and Design, held in Chennai, January, 2001.
- 90. Haldar, S and Manna, M. C. "Analysis of thick orthotropic and laminated composite plates using a shear deformable element", All India Seminar on Structures in the 21st. Century, held on 8th. and 9th. Dec. 2000 in The Institute of Ingineers (India). Organised by American Society of Civil Engineers- India section.
- 91. Haldar, S. "H.R.D. and Training in Welding", Annual Seminar of the Indian Institute of Welding, 1996
- 92. Haldar, S. "Stick-slip behavior of Cast Iron and Mild Steel", SalilHaldar. ATM47 NMD31, 1993.

- 93. Haldar, S. "Effect of air drying on the properties of clay-bonded sand", 42nd Indian Foundry Congress, 1994.
- 94. Haldar, S. 'To achieve optimum cupola charge calculation by mathematical model'. 41st Indian Foundry Congress, 1993
- 95. Haldar, S andModak, N. "Development and testing of glass-fiber reinforced disposal rubber composite",. University of Calcutta, 2003.
- 96. Paul, S., Kalita, K., Dutta, A and Haldar, S. "Static analysis of rectangular plate with internal cut-out using finite element", method'. IIT, Chennai, 2013 (INCAM_2013_SM_98).
- 97. Chakrabarty A., Khutia N., Bar H. N., Dey P. P., Sivaprasad S., Effect Of Loading Variations On Damage Of SA333 C-Mn Steel, Accepted for Publication in Materials TodayProceedings, Elsevier as Proceedings of 5th International Conference on Materials Processing and Characterization (ICMPC-2016), 12th to 13th March, 2016, GRIET, Hyderabad.
- 98. Das B. K., BakkarMd Abu, Khutia N., Das D. D., Low Cycle Fatigue Performance Evaluation of TMT rebar, Accepted for Publication in Materials TodayProceedings, Elsevier as Proceedings of 5th International Conference on Materials Processing and Characterization (ICMPC-2016), 12th to 13th March, 2016, GRIET, Hyderabad.
- 99. Roy S., Pradhan R., Khutia N., Das D., Roy Chowdhury A., FE modeling and analysis from micro CT data of porous Ti6Al4V material. International conference on Advanced Materials and Energy Technology held at IIEST, Shibpur on 17th to 19th December, 2014.
- 100.Basantia S. K., BakkarMd Abu, Khutia N., Das D. D., Simulation of Low Cycle Fatigue Characteristics of Under Aged AA6063 Al-alloy, International Conference on Advanced Materials and Energy Technology (ICAMET 2014), IIEST, Shibpur from 17th to 19th December, 2014.
- 101.Singh R. B., Khutia N., Dey P.P., Sivaprasad S., Evaluation of uniaxial and multiaxial fatigue of carbon steel through experiment and simulation using advanced kinematic hardening models, Asian Conference on Mechanics of Functional Materials and Structures (ACMFMS 2014), Nara, Japan from 10th to 13th October, 2014.
- 102. Khutia N., Dey P.P., Sivaprasad S., Modification of Ohno Wang cyclic plasticity model through simulation and experimentation of 304LN stainless steel specimen. Asian Conference on Mechanics of Functional Materials and Structures (ACMFMS 2014), Nara, Japan from 10th to 13th October, 2014.
- 103. Roy S., Khutia N., Das D., Roy Chowdhury A., FE analysis and deformation behavior of laser based porous Ti6Al4V using static loading condition, Asian Conference on Mechanics of Functional Materials and Structures (ACMFMS 2014), Nara, Japan from 10th to 13th October, 2014.
- 104. Roy S., Khutia N., Das D., Roy Chowdhury A., "Deformation Behavior of Solid and Porous Ti6Al4V Alloy under Static Loading Condition using FE Analysis", "Microstructure and Materials, 12th to 13th March, 2014, held at Bengal Engineering and Science University, Shibpur, Howrah, West Bengal.
- 105. Khutia N., Dey P. P., "Optimization of input material parameters for Ohno-Wang hardening model using Genetic Algorithm", Proc. of Int. Conference on Computer Aided Engineering (CAE-2013), Pages 574-579, IIT Chennai, 19th to 21st December, 2013.
- 106. Das P., Khutia N., Dey P.P., "Sensitivity analysis of Chaboche parameter for characterization of cyclic plasticity behaviour", Proc. of Int. Conference on Computer Aided Engineering (CAE-2013), Pages 465-470, IIT Chennai, 19th to 21st December, 2013.

- 107. Singh R. B., Khutia N., Sivaprasad S., Dey P.P., "Application of genetic algorithm in the calibration of Ohno Wang kinematic hardening model for SA333 C-Mn Steel", Proc. of 58th Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM 2013), BESU, Shibpur,18th to 21st December, 2013.
- 108. Roy S., Panda D., Deb A., Bhowmick S., Khutia N., Roy Chowdhury A., Finite element analysis of porous Ti-6Al-4V rectangular parallelepiped models under flexure", Proc. of 58th Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM 2013), BESU, Shibpur, 18th to 21st December, 2013.
- 109. Basantia S., Roy S., Khutia N., Roy Chowdhury A., "Development of new element for finite element analysis of composite plates", Proc. of 58th Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM 2013), BESU, Shibpur,18th to 21st December, 2013.
- 110. Roy S., Biswas J., Panda D., Deb A., Bhowmik S., Khutia N., Roy Chowdhury A., "Finite element study on crack development of titanium alloy (Ti6Al4V) specimen", Indian Conference on Applied Mechanics, INCAM-2013, 4th to 6th July, IIT Madras.
- 111. Roy, S., Khutia, N., Roy Choudhury, A. "Weight and Natural Frequency Optimization of Automotive Engine Oil Sump Using Fibre Reinforced Composite Laminates", Third Asian Conference on Mechanics of Functional Materials and Structures, 2012 (ACMFMS 2012) held at Delhi.
- 112. Roy, S., Panda, P., Deb, A., Bhowmick, S., Khutia, N., Roy Choudhury, A. "Response of the effective modulus for different percentage of pore volume and pore size", Indian Society of Theoretical and Applied Mechanics, 2012 (ISTAM 2012) held at DIAT, Pune.
- 113. Khutia N., Saha R., Maiti R., "Stability analysis of a load sensing Hydrostatic Transmission System -Modeling & Simulation approach". ASME Design and Automation Conference, Maryland USA, 2000.
- 114. Debal Saha, Ranjit Ray, and S. Bhaumik, "Dynamic Modelling of a Skid-Steered Twelve wheeled Mobile Robot using a 'slip' -'friction coefficient' relationship and its Trajectory Tracking Control" IEEE-International Conference on Advances In Engineering, Science And Management (ICAESM -2012), 2012, pp: 192-197, 2012
- 115. Srijan Bhattacharya, Bikash Bepari and Subhasis Bhaumik, "Novel approach of IPMC actuated finger for micro-gripping" 4th IEEE Informatics, Electronics & Vision (ICIEV), 2015 International Conference, Fukuoka, Japan, 15-18 June 2015,
- 116. Srijan Bhattacharya, Bikash Bepari and Subhasis Bhaumik, "Soft Robotic Finger Fabrication with PDMS and IPMC Actuator for Gripping" IEEE SAI Computing Conference 2016, 13-15 July 2016, London, United Kingdom (Accepted).

Patent - Nil

School of VLSI

Publications :

International Journals/Edited Volumes

2016-17

- 1. Sayan Kanungo, S. Chattopadhyay, Partha Sarathi Gupta, Kunal Sinha and Hafizur Rahaman, "Study and Analysis of the Effects of SiGe Source and Pocket Doped Channel on Sensing Performance of Dielectrically-Modulated Tunnel FET based Bio-Sensors", *IEEE Transactions on Electron Devices*, April 2016 (Accepted), [Impact Factor= 2.472, Citations= 0].
- 2. Sandip Bhattacharya, Debaprasad Das and Hafizur Rahaman,"Reduced Thickness Interconnect Model using GNR to Avoid Crosstalk Effects", *Journal of Computational Electronics (JCEL) 2016*, Springer Publication, DOI: 10.1007/s10825-016-0794-5, (With PhD Student). [Impact Factor= 1.520, Citations= 0]
- 3. Debaprasad Das and Hafizur Rahaman, "Investigating the Applicability of Graphene Nanoribbon as Signal and Power Interconnects for Nanometer Designs", *Journal of Circuits, Systems, and Computers (JCSC)*, World Scientific, Vol. 25, No. 2 (2016), pp-1-14, DOI: 10.1142/S0218126616500018 (With PhD Student). [Impact Factor= 0.25, Citations= 0]
- 4. Partha Sarathi Gupta, S. Chattopadhyay, P. S. Dasgupta and Hafizur Rahaman, "A Novel Photo-sensitive Tunneling Transistor For Near-Infrared Sensing Applications: Design, Modeling and Simulation", *IEEE Transactions on Electron Devices, (TED 2015),* DOI:10.1109/ TED. 2015.2414172, (With PhD Student). [Impact Factor= 2.472, Citations= 0]

2015-2016

- 5. Bikash Sharma, Arnab Mukhopadhyay, Amretashis Sengupta, Hafizur Rahaman and C. K. Sarkar, "Analysis of tunneling currents in Multilayer Black Phosphorous and MoS₂ non volatile flash memory cells", *Journal of Computational Electronics*, Vol. 15, Issue 1, pp. 129-137 (Mar 2016), [Impact Factor= 1.520, Citations= 0]
- A. Sengupta, M. Audiffred, T. Heine, T.A. Niehaus, "Stacking dependence of carrier transport properties in multilayered black phosphorous", *Journal of Physics*: Condensed Matter, vol. 28, pp. 075001 (1-10) (Jan 2016). [Impact Factor= 2.346, Citations= 0]
- 7. A. Mukhopadhyay, L. Banerjee, A. Sengupta, H. Rahaman "Effect of Stacking Order on Device Performance of Bilayer Black Phosphorene-FET" *Journal of Applied Physics*, vol. 118, pp. 224501 (1-5) (Dec 2015). [Impact Factor= 2.276, Citations= 0].
- 8. Indranil Hatai, Indrajit Chakrabarti, Swapna Banerjee, "An efficient constant multiplier architecture based on vertical-horizontal binary common sub expression elimination algorithm for reconfigurable FIR filter synthesis", *IEEE Transactions on Circuits and Systems-I: Regular Papers*, vol.62, no.4, pp.1071-1080, April, 2015, DOI: 10.1109/TCSI.2015.2388838 [Impact Factor= 2.403]
- 9. Indranil Hatai, Indrajit Chakrabarti, Swapna Banerjee, "An Efficient VLSI Architecture of a Reconfigurable Pulse-Shaping FIR Interpolation Filter for Multi-Standard DUC", *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, vol.23, no.6, pp.1150-1154, June, 2015 DOI: 10.1109/TVLSI.2014.2321171 [Impact Factor= 1.356]

2014-2015

10. Sayan Kanungo, S. Chattopadhyay, Partha Sarathi Gupta and Hafizur Rahaman, "Comparative Performance Analysis of the Dielectrically Modulated Full Gate and Short Gate Tunnel FET based Bio-Sensors", *IEEE Transactions on Electron Devices*, (*TED 2015*), Vol.62, Issue 3, DOI:10.1109/TED.2015.2390774, (With PhD Student). [Impact Factor= 2.472, Citations=1].

- 11. Nachiketa Das, Pranab Roy, and Hafizur Rahaman, "Detection of Crosstalk Faults in Field Programmable Gate Arrays (FPGA)", *Journal of the Institution of Engineers (India): Series B, Springer publication*, 2014, (Accepted), (With PhD Student), (DOI:- 10.1007/s40031-0140141-9). [Impact Factor= NA, Citations=0]
- Amretashis Sengupta, Anuja Chanana, and Santanu Mahapatra, "Phonon scattering limited performance of monolayer MoS₂ and WSe₂ n-MOSFET", *AIP Advances*, vol. 5, No. 2, pp. 027101 (1-9) (Feb 2015). [Impact Factor= 1.591, Citations= 0]
- A. Sengupta, D. Saha, T.A. Niehaus and S. Mahapatra, "Effect of line defects on the electrical transport properties of monolayer MoS₂ sheet", *IEEE Transactions on Nanotechnology* vol.14, No. 1, pp. 51-56 (Jan 2015). [Impact Factor= 1.825, Citations= 2]
- 14. Amretashis Sengupta and Chandan Kumar Sarkar, "Study on Nanoparticles Embedded Multilayer Gate Dielectric MOS Non Volatile Memory Devices", *International Journal of Nanotechnology IEEE INEC Special Issue*, Vol.11, No.12, pp.1073 1080 (Dec 2014). [Impact Factor= 1.335, Citations= 0]
- 15. D. Saha, A. Sengupta, S. Bhattacharyya and S. Mahapatra, "Impact of Stone-Wales and lattice vacancy defects on the electro-thermal transport of the free standing structure of metallic ZGNR" *Journal of Computational Electronics* Volume 13, Issue 4, pp 862-871 (Aug 2014). [Impact Factor= 1.520, Citations= 0]

2013-2014

- 16. A. Chanana, A. Sengupta, and S. Mahapatra, "Performance Analysis of Boron Nitride Embedded Armchair Graphene Nanoribbon MOSFET with Stone Wales Defects" *Journal of Applied Physics* Vol. 115, Issue 3, pp. 034501 (Jan 2014). [Impact Factor = 2.276, Citations= 7]
- 17. Nachiketa Das, Pranab Roy, and Hafizur Rahaman, "Bridging Fault Detection in Cluster Based FPGA by Using Muller C Element", *Computers & Electrical Engineering (Elsevier)*, <u>Vol. 39</u>, <u>Issue 8</u>, November 2013, pp. 2469–2482, (DOI:10.1016/j.compeleceng.2013.08.009). [Impact Factor= 0.817, Citations=0]
- Nachiketa Das, Pranab Roy and Hafizur Rahaman, "Built-In-Self-Test Technique for Diagnosis of Delay Faults in Cluster Based Field Programmable Gate Arrays", *IET Computers & Digital Techniques*, Vol.7, <u>Issue 5</u>, September 2013, pp.201-220. (With PhD Student). (DOI 10.1049/iet-cdt.2012.0111). [Impact Factor= 0.356, Citations=0]
- 19. Amretashis Sengupta and Santanu Mahapatra, "Negative differential resistance and effect of defects and deformations in MoS2 armchair nanoribbon MOSFET", *Journal of Applied Physics* Vol. 114, pp. 194513 (Nov. 2013). [Impact Factor= 2.276, Citations= 11]
- Amretashis Sengupta, Ram Krishna Ghosh and Santanu Mahapatra, "Performance Analysis of Strained Monolayer MoS₂ MOSFET", *IEEE Transactions on Electron Devices* Vol. 60, pp. 2782 (Sep 2013). [Impact Factor= 2.472, Citations= 16]
- 21. Amretashis Sengupta and Santanu Mahapatra, "Performance limits of transition metal dichalcogenide (MX₂) nanotube surround gate ballistic field effect transistors", *Journal of Applied Physics* Vol. 113, pp. 194502 (May 2013). [Impact Factor= 2.276, Citations= 12]
- 22. Amretashis Sengupta, and Chandan Kumar Sarkar, "Surface Potential Based Analytical Modeling of Double Gate MOSFET Non-Volatile Memory with Si and Au Nano-dots Embedded Gate Dielectric", *Journal of Computational & Theoretical Nanoscience*, Vol. 10, No. 4, pp. 906-913 (Apr 2013). [Impact Factor= 1.343, Citations= 6]

2012-2013

23. Debaprasad Das and Hafizur Rahaman, "Modeling of Single-Wall Carbon Nanotube Interconnects for Different Process, Temperature, and Voltage Conditions and Investigating Timing Delay", *Journal of Computational Electronics (Springer)*, Volume 11, Issue 4 (2012), pp. 349-363. (With PhD Student). (DOI 10.1007/s10825-012-0415-x). [Impact Factor= 1.520, Citations=3]

- 24. Nachiketa Das, I. Banerjee, and Hafizur Rahaman, "BIST to Diagnosis Delay Fault in the LUT of Cluster Based FPGA." *International Journal of Information and Electronics Engineering*, Vol. 2, No.2, 2012, ISSN 2010-3719, pp-269-273. [Impact Factor=2.5, Citations=4]
- 25. Amretashis Sengupta, Chandan Kumar Sarkar, and Felix G. Requejo, "Semi-Analytical modeling of Ag and Au nanoparticles and fullerene (C60) embedded gate oxide Compound Semiconductor MOSFET memory Devices", *Journal of Computational Electronics*, Vol. 11, Issue 4, pp. 303-314 (May 2012). [Impact Factor= 1.520, Citations= 1]
- 26. Satyabhama Dash, Gargi Chakraborty, Amretashis Sengupta, Chandan Kumar Sarkar, "Optimization of tunneling currents through CNT & Si nanocrystals embedded gate oxide MOS Structure using Genetic Algorithm approach for memory device application", *Journal of Computational and Theoretical Nanoscience*, Vol. 9, No. 3, pp. 434-440 (Mar 2012). [Impact Factor= 1.343, Citations= 5].
- 27. Amretashis Sengupta, Pashupati Shah, Chandan Kumar Sarkar, Felix G. Requejo, "Computational study on semiconducting and metallic nanocrystal embedded gate oxide MOS non-volatile memory devices", *Advanced Science Letters*, Vol. 10, No. 1, pp. 47-54 (May 2012). [Impact Factor= 1.253, Citations= 3]
- 28. Amretashis Sengupta, and Chandan Kumar Sarkar, "Analytical Modelling of Si and Au Nanocrystal Embedded Multilayer Gate Dielectric Long Channel Silicon Nanowire Surround Gate MOSFET Non Volatile Memory Devices" *Nanoscience & Nanotechnology Letters*, Vol. 4, No. 7, pp. 667-675 (July 2012). [Impact Factor= 1.431, Citations= 3]

Conference

2016-17

1. Sandip Bhattacharya, Debaprasad Das and Hafizur Rahaman, "Temperature Dependent IR Drop and Delay Analyses in Side-Contact Multilayer Graphene Nanoribbon Based Power Interconnects", 20th International Symposium on VLSI Design and Test 2016 (PhD Student), IEEE CS Press. [Citations=0]

2015-16

- 2. Sudipta Bardhan , Manodipan Sahoo and Hafizur Rahaman , Analytical Drain Current Model for Graphene Metal-Oxide semiconductor Field-Effect Transistor", *IEEE 2nd International Conference on Electrical Information and Communication Technologies (EICT)* 2015.
- 3. Sabir Ali Mondal, Suraj Gupta and Hafizur Rahaman, "Improved supply regulation and temperature compensated current reference circuit with low process variations", *19th International Symposium on VLSI Design and Test (VDAT)*, 2015, DOI:10. 1109/ ISVDAT. 2015.7208049.
- 4. Subrata Das., Parthasarathi Dasgupta, Petr Fiser, Sudip Ghosh and Debesh Kumar Das "A Rule-Based Approach for Minimizing Power Dissipation of Digital Circuits" in 19th IEEE International Symposium on Design and Diagnostics of Electronic Circuits and Systems (DDECS) from April 20-22, 2016, at Košice, Slovakia, Europe.
- 5. Aritra Chatterjee, Kasturi Ghosh and Hafizur Rahaman, "Parametric fault detection from time domain analysis of linear analog circuits," *Third International Conference on Electronics and Communication Systems*, Feb. 25-26, 2016, Coimbatore, India.
- 6. Manas Parai, Kasturi Ghosh and Hafizur Rahaman, "Fault detection of continuous time filter using nonlinear based OBIST", IEEE *CODEC*, December 16-18, 2015.
- 7. Gupta, P.S.; Rahaman, H.; Dasgupta, P.S.; Chattopadhyay, S.," A Photosensitive Line Tunneling Transistor for Near-Infrared Sensing Applications," in *Computers and Devices for Communication (CODEC)*, 2015 6th International Conference on , 16-18 Dec., 2015 (Best paper award)
- 8. Arnab Mukhopadhyay, Lopamudra Banerjee, Amretashis Sengupta, Hafizur Rahaman, "Strain Modulated Variations in Monolayer Phosphorene n-MOSFET", 2015 IEEE Conference on Electron Devices and Solid State Circuits (IEEE EDSSC 2015) Singapore, June 1-4, 2015.
- 9. A. Chanana, A. Sengupta, S. Mahapatra, "Analysis of vacancy defects in hybrid graphene boron nitride armchair nanoribbon based n-MOSFET at ballistic limit", 2015 International Workshop on Computational Electronics (IWCE), Purdue University, West Lafayette, IN,USA, Sep 2, 2015.

2014-15

- Sandip Bhattacharya, Debaprasad Das and Hafizur Rahaman, "<u>A Novel GNR Interconnect Model to Reduce Crosstalk Delay</u>", 5th IEEE International Symposium on Electronic System Design (ISED 2014), pp. 5-9, DOI 10.1109/ISED.2014.9. [Citations=1]
- 11. Sayan Kanungo, Partha Sarathi Gupta, Hafizur Rahaman, "Effects of Germanium Mole Fraction Variation at the Source of a Dielectrically Modulated Tunneling FET based Biosensor", *ICDCS 2014*, pp.86-90. DOI: 10.1109/ICDCSyst.2014.6926218. [Citations=0]
- 12. Sandip Bhattacharya, Subhajit Das, Debaprasad Das and Hafizur Rahaman, "Electrical Transport in Graphene Nanoribbon Interconnect", *ICDCS'14*, 250-253. DOI: 10.1109/ICDCSyst.2014.6926148. [Citations=0]
- 13. Sabir Ali, Manodipan Sahoo and Hafizur Rahaman, "A New Feedback Circuit Based Charge Pump for Wide-Range and Low-Jitter DLL suitable for PET Imaging Applications", *ICDCS'14,pp.137-141. DOI:* 10.1109/ICDCSyst.2014.6926125. [Citations=0]
- 14. Debaprasad Das, and Hafizur Rahaman, "RF Performance Analysis of Graphene Nanoribbon Interconnect Decision", *IEEE TechSym 2014. DOI: 10.1109/TechSym.2014.6807923.* [Citations= 2]
- 15. A. Mukhopadhyay, L. Banerjee, A. Sengupta and H. Rahaman, "ON current variations in AGNR-FET due to intrinsic rippling", *INUP Compact modeling workshop*, IISc, Bangalore, 22 23 August, 2014.
- 16. M. Guha, A. Sengupta, M. Sahoo and H. Rahaman, "Effect of defects on performance and signal integrity of multilayer GNR interconnects", *INUP Compact modeling workshop*, IISc, Bangalore, 22 23 August, 2014.
- B. Sharma, G. Chakraborty, A. Sengupta, H. Rahaman, and C.K. Sarkar, "Study of the Tunneling Characteristics of Metal and Semiconductor Nanoparticles Embedded Gate Dielectric in MOS structures", *International Conference on Advanced Materials and Energy Technology (ICAMET) 2014* December 17-19, 2014, IIEST Shibpur, Howrah, West Bengal, India
- 18. Indrajit Das, Manodipan Sahoo, Pranab Roy, Hafizur Rahaman, "A 45 uW 13 pJ/conv-step 7.4-ENOB 40 kS/s SAR ADC for digital microfluidic biochip applications", *IEEE* VDAT, *July*, 2014: pp.1-6. [Citation=-1]

2013-14

- 19. Sourav Chakraborty, Manodipan Sahoo and Hafizur Rahaman, "A 1.8 V 64.9 μ W 54.1 dB SNDR 1st order $\Sigma\Delta$ modulator design using clocked comparator based switched capacitor technique", *IEEE* 5th Asian Symposium on Quality Electronic Design (*ASQED 2013*), *pp.220-226*. *DOI:10.1109/ ASQED. 2013*. 6643591 [Citations=1]
- 20. Kanungo, S.; Gupta, P.S.; Rahaman, H., "Effects of Germanium mole fraction variation at the source of a dielectrically modulated Tunneling FET based biosensor," in *Devices, Circuits and Systems (ICDCS)*, 2014 2nd International Conference on , vol., no., pp.1-5, 6-8 March, 2014.
- 21. Indranil Hatai, Indrajit Chakrabarti, Swapna Banerjee, "FPGA implementation of a fetal heart rate measuring system", *International Conference on Advances in Electrical Engineering (ICAEE)*, August, 2013, pp. 160-164, Dhaka, Bangladesh (Won third best paper award).
- 22. Indranil Hatai, Indrajit Chakrabarti, Swapna Banerjee, "Reconfigurable architecture of a RRC FIR interpolator for multi-standard digital up converter", *IEEE 27th International Parallel and Distributed Processing Symposium Workshops & PhD Forum (IPDPSW)*, pp. 247-251, 20-21 May , 2013, Boston, U.S.A.

2012-13

23. Parthasarathi Gupta, Jayita Das, Debasree Burman, Madhuchhanda Brahma, Parthasarathi Dasgupta, and Hafizur Rahaman, "Analytical Study of the Effect of Asymmetric Gate Bias on the Performance of double gate TFET", *IEEE International Conference on Communications, Devices and Intelligent Systems (CODIS 2012),pp.-149-152. DOI:10.1109/ CODIS. 2012.* 6422157 [Citations=0]

- 24. Parthasarathi Gupta, Debasree Burman, Jayita Das, Madhuchhanda Brahma, Parthasarathi Dasgupta and Hafizur Rahaman, "Modeling The Channel Potential And Threshold Voltage of a Fully Depleted Double Gate Junctionless FET", *IEEE International Conference on Communications, Devices and Intelligent Systems (CODIS 2012), pp.153-156. DOI: 10. 1109/ CODIS.2012.6422158* [Citations=0]
- 25. Parthasarathi Gupta, Madhuchhanda Brahma, Jayita Das, Debasree Burman, Parthasarathi Dasgupta and Hafizur Rahaman, "Performance Analysis and Simulation Study of a Sandwiched Barrier Tunnel FET", *IEEE International Conference on Communications, Devices and Intelligent Systems (CODIS 2012), pp.457-460. DOI:* 10.1109/CODIS.2012.6422232 [Citations=0]
- 26. Sayan Kanungo, Partha Sarathi Gupta, Hafizur Rahaman, Partha Sarathi Dasgupta, "A Detail Simulation Study on Extended Source Ultra-Thin Body Double-Gated Tunnel FET", 5th IEEE International Conference on Computers and Devices for Communication (CODEC 2012)., DOI:10.1109/CODEC.2012.6509242 [Citations=1]
- 27. Debaprasad Das, and Hafizur Rahaman, "Modeling of IR-Drop Induced Delay Fault in CNT and GNR Power Distribution Networks", 5th IEEE International Conference on Computers and Devices for Communication (CODEC 2012). DOI: 10.1109/CODEC.2012.6509350 [Citations=3]
- 28. Kunal Sinha, Hafizur Rahaman, Sanatan Chattopadhyay, "A Study on the Performance of Stress Induced p-channel MOSFETs with Embedded Si(1-x)Ge(x) Source/Drain", 5th IEEE International Conference on Computers and Devices for Communication (CODEC 2012), DOI: 10.1109/CODEC.2012.6509246 [Citations=0]
- 29. Sayan Kanungo, Hafizur Rahaman, Parthasarathi Gupta, Parthasarathi Dasgupta, "A simple analytical model of silicon on insulator tunnel FET", 5th IEEE International Conference on Computers and Devices for Communication (CODEC 2012). DOI: 10.1109/CODEC.2012.6509256 [Citations=2]
- 30. Sabir Ali Mondal, Sourav Pal, Pradip Mondal, Hafizur Rahaman, "Voltage Controlled Current Starved Delay Cell for Positron Emission Tomography specific DLL based high precision TDC implementation", 5th IEEE International Conference on Computers and Devices for Communication (CODEC 2012). DOI: 10.1109/CODEC.2012.6509270 [Citations=2]
- 31. Debaprasad Das, Sourav Das and Hafizur Rahaman, "Design of 4-Bit Array Multiplier using Multi-Wall Carbon Nanotube Interconnects", 3rd IEEE International Symposium on Electronic System Design (ISED 2012), IEEE CS Press, USA, 208-211, DOI:10.1109/ISED.2012.19 [Citations=0]
- 32. Debaprasad Das and Hafizur Rahaman, "Unified Model for Analyzing Timing Delay and Crosstalk Effects in Carbon Nanotube Interconnects", *IEEE ASQED 2012, pp.*100-109. DOI: 10.1109/ACQED.2012.6320484 [Citations=4]
- 33. Partha Sarathi Gupta, Sayan Kanungo, Hafizur Rahaman and Partha Sarathi Dasgupta,"A simple analytical study of a low sub-threshold swing ultra thin body Silicon on Insulator Tunnelling Transistor for Low Power Application", 12th IEEE International Conference on Nanotechnology (NANO 2012), 2012, UK, pp.1-6. [Citations=0]
- 34. Debaprasad Das and Hafizur Rahaman, "Simultaneous Switching Noise and IR Drop in Graphene Nanoribbon Power Distribution Networks", 12th IEEE International Conference on Nanotechnology (NANO 2012), UK, pp.1-6. DOI: 10.1109/NANO.2012.6321893 [Citations=4].
- 35. Partha Sarathi Gupta, Sayan Kanungo, Hafizur Rahaman and Partha Sarathi Dasgupta, "Analysis and Study of an Ultra-Thin-Body-Silicon-On- Insulator-Tunnel FET Transistor", 16th International Symposium on VLSI Design and Test 2012, pp.379- 380 [Citations=0]
- 36. Partha Sarathi Gupta; Kanungo, Sayan; Rahaman, Hafizur; Partha Sarathi Dasgupta, "A novel design technique for effective SCE control in nano-scaled devices using a buried metal", *IEEE International Conference on Computing, Electronics and Electrical Technologies* (ICCEET 2012), 2012, Pp. 761 765. DOI: 10.1109/ICCEET.2012.6203784. [Citations=1]
- 37. Partha Sarathi Gupta, Hafizur Rahaman, Sayan Kanungo, and Partha Sarathi Dasgupta; "Analysis and study of different parameters affecting the I-V characteristics of Tunnel-FET Transistor", IEEE International Conference on Devices, Circuits and Systems, 2012. DOI: 10.1109/ICDCSyst.2012.6188680 [Citations=0]
- 38. Partha Sarathi Gupta, Sayan Kanungo, Hafizur Rahaman, Kunal Sinha, Partha Sarathi Dasgupta; "An *Extremely Low Sub-threshold Swing UTB SOI Tunnel-FET Structure Suitable for Low-Power*", International Conference on Engineering Mathematics and Physics (ICEMP-2012). DOI: 10.7763/IJAPM.2012.V2.101. [Citations=2]

39. Amretashis Sengupta, and Chandan Kumar Sarkar, "Comparative Study on Nanocrystal Embedded Gate Dielectric and Oxide Nitride Oxide Stack Dielectric GAA MOSFET Non volatile Memory Devices", *IEEE-IAPR-OSA International Conference on Informatics Electronics & Vision (ICIEV- 2012)* Dhaka, Bangladesh, 18th -19th May, 2012.

Books

- 1. Debaprasad Das and HafizurRahaman. *Carbon Nanotube and Graphene Nanoribbon Interconnects.* CRC Press (Taylor and Francies Group), USA, December 2014.
- 2. Sengupta and C.K. Sarkar (Eds.), "Introduction to Nano: Basics to Nanoscience and Nanotechnology", Springer Verlag (Berlin/Heidelberg), 2015. (ISBN: 978-3-662-47313-9)
- 3. Indranil Hatai, "FPGA implementation of a reconfigurable baseband modem for SDR system", LAP Lambert Academic Publishing AG & Co KG (23 April 2012), (ISBN: 978-3- 8484-8680-9)

Patents:

- 1. Budhaditya Majumdar, Sudipta Chakraborty, and HafizurRahaman, "A Novel Reusable Sub Volt Differential Amplifier Module for Use as a Preamplifier Output Stage", Indian Patent, Application No.169/KOL/2013A, (Filed on 20-02-2013, Issued on 25-09-2015).
- 2. Budhaditya Majumdar, Sudipta Chakraborty, and HafizurRahaman, "*Crossover Biasing Technique for Quad Input Differential Amplifiers*", Indian Patent, No.196/KOL/2013A, (Filed on 20-02-2013, Issued on 25-09-2015).

Architecture, Town and Regional Planning

COMPLETE LIST OF PUBLICATIONS

(Journals, conference proceedings, books and book chapters, technical reports and patents)

JOURNALS

- 1. Paul, S.K, Roy,S., "Tourism based heritage conservation in Murshidabad: an appraisal," Journal of Heritage Tourism [ISSN 1743-873X (Print), 1747-6631 (Online)], Routledge, Taylor and Francis, (DOI: 10.1080/1743873X 2016.1159685), March, 2016, pp. 2-16.
- 2. Mukhopadhyay, P. and Dutta, S. C. "Rapid visual screening of earthquake-susceptible buildings." Proceedings of the Institution of Civil Engineers Municipal Engineer, ICE, Vol. 169, No. 1, 2016, pp. 1-8, Impact Factor: 0.15.
- 3. Mitra, S., Guha Niyogi, J., GuhaNiyogi, A., "Methodology for Deciding Route-Specific Appropriate Transit Modes based on Stakeholders' Utility Values: Applicability in Indian Cities", Indian Journal of Transport Management, Vol. 39, No. 2, 2015, pp.60-75.

- 4. Roy, S., "Sustainable Slum Improvement Models: Ban Mankong in Thailand and PRODEL in Nicaragua,"TerraGreen, Issue 7(12), 2015, pp.23-28.
- 5. Roy, S., "Significance of Pre-operational Embodied Water of Buildings in Innovative and Sustainable Design Practices", Technical Journal of The Institution of Engineers (India) Pune Local Centre, Issue 39, 2015, pp.74-78.
- Mukhopadhyay, P. and Dutta, S. C. "Investigating Compressive and Cleavage Strengths of an Indian Bamboo Species." Journal of Materials in Civil Engineering, ASCE, Vol. 27, No. 9, 2015, pp. 06014029-1 – 8, Impact factor: 1.32.
- 7. Dutta, S. C., Mukhopadhyay, P. S., Saha, R. and Nayak, S. "2011 Sikkim Earthquake at Eastern Himalayas: Lessons learnt from performance of structures." Soil Dynamics and Earthquake Engineering, Elsevier, Vol. 75, 2015, pp. 121-129, Impact Factor: 1.30.
- Mitra, K., Ailawadi, S., Rai, D.C., "Initiatives in Educating Future Architects in Earthquake Resistant Design Practices", Seismological Research Letters, Vol.84, No. 5, September/October 2013, pp 820-828, Impact Factor: 2.268, Citations:2.
- Biswas S., Chowdhury D., Roy, A., Yohanis, YG., and Neogi S., "Thermal Performance of a Multistoried Residential Apartment in Winter Season at Kolkata," International Journal of Emerging Technology and Advanced Engineering, Volume 3, Special Issue 3: ICERTSD 2013, An ISO 9001:2008 certified Int. Journal, ISSN 2250-2459, Feb 2013, pp. 321-328.
- Dutta, S. C., Mukhopadhyay, P., and Goswami, K. "Augmenting Strength of Collapsed Unreinforced Masonry Junctions: Principal Damage Feature of Walls Damaged by Moderate Indian Earthquakes." Natural Hazards Review, ASCE, Vol. 14, No. 4, 2013, pp. 281–285, Impact Factor: 0.79, Citations: 3.
- 11. Mitra, S. and Guha Niyogi, J., "Assessing Critical Trip Lengths of Commuters for Selecting Transit over Personal Modes - Case Application: Medium Sized Indian Cities," Indian Journal of Transport Management, Vol. 37, No. 3, 2013, pp.175-194.
- Mukhopadhyay, P., and Dutta, S. C. "Strongest Cyclone of the New Millennium in the Bay of Bengal: Strategy of RVS for Nonengineered Structures." Natural Hazards Review, ASCE, Vol. 13, No. 2, 2012, pp. 97-105, Impact Factor: 0.79, Citations: 2.
- 13. Mitra, K., "Workshop for Architecture students," The Indian Concrete Journal, Vol. 85, No.1, 2011, pp. 51-54.

- Rai, D.C., Mondal, G., Singhal, V., Parool, N., Pradhan, T & Mitra, K, "Reconnaissance report of the M6.9 Sikkim (India–Nepal border) Earthquake of 18 September 2011", Geomatics, Natural Hazards and Risk, Vol. 3, No. 2, 2012, pp. 99-111, Impact Factor: 0.977, Citations: 7.
- Mitra S., GuhaNiyogi J., "A Quick Assessment Technique to Determine Profitability in Private City-Bus-Services - Case Study Kolkata-Howrah Urban Area, India," International Journal of Research in Management and Technology, ISSN: 2249-9563, Vol. 2, No. 4, 2012, pp.383-389. Impact Factor: 0.765, Citations:1
- Mamun A., Mitra S., (2012), A Methodology for Assessing Tourism Potential: Case Study Murshidabad District, West Bengal, India, International Journal of Scientific and Research Publications, Vol. 2, Issue 9., pp - 1-8, Impact Factor: 2.07, Citations: 5.
- 17. Das, B. & Bandyopadhyay, A., "Perspective of Watershed Management in our Modern Society." International Journal of Computational Engineering Research (IJCER), November, 2012.
- 18. Das, B. &Bandyopadhyay, A. "A Model of Watershed Management Process: A Case Study of Rarh Region in Gangetic Delta." International Journal of Engineering Research and Development, IJERD, November, 2012.
- 19. Das, B. &Bandyopadhyay, A, "The Challenge Of Slum Development In India: A Case Study of Melatala-Dasnagar Slum Area of Howrah Municipal Corporation", International Journal of Advanced System and Social Engineering Research, IJASSER, November, 2012.
- Das, B. &Bandyopadhyay, A. "Agradweep -A Sectoral Place Changing Location by Bhagirathi's River Bank Erosion." International Journal of Scientific and Research Publications (ISSN 2250-3153), Volume 2, Issue 10, October 2012.
- 21. Das, B., Bandyopadhyay, A. &Sen, J. "Industrial Based Migration In India: A Case Study Of Dumdum Dunlop Industrial Zone." IJoART, Vol. 1, Issue 5, October 2012.
- 22. Das, B. &Bandyopadhyay, A. "Causes Of Flood By Indian River A Case Study of Transboundary River Icchamati In Gangetic Delta.", International Journal of Advanced Research in Computer Science and Electronics Engineering (IJARCSEE), Volume 1, Issue 7, September 2012.
- 23. Das, B. &Bandyopadhyay, A. "Geo-Environmental Problems of Flood By Bhagirathi River: A Case Study of Agradweepof Bardhawan District In Gangetic Delta." IJSETR, Volume1, Issue 5, September, 2012.
- 24. Das, B. &Bandyopadhyay, A, "Climate Change And Environmental Problem In World A General Overview.", IJSETR, Volume1, Issue 6, October, 2012.

- Das, B. &Bandyopadhyay, A. "Risk Reduction Management of Flood By Bhagirathi River: A Case Study of Agradweepof Bardhawan District In Gangetic Delta.", IJSETR, Volume1, Issue 5 November, 2012
- 26. Rai, D.C., Mondal, G., Singhal, V., Parool, N., Pradhan, T & Mitra, K, "The M 6.9 Sikkim (India– Nepal Border) earthquake of 18 September 2011", Current Science, Vol.102, No. 10, 2012, pp 14-37, Impact Factor: 0.905, Citations: 4
- 27. Mukhopadhyay B.P., Roy S., Chaudhuri S., Mitra S., "Influence of Geological Parameters on Landslide Vulnerability Zonation of Darjeeling Town in Eastern Himalayas," Asian Journal of Environment and Disaster Management (AJEDM), Volume 4, No. 2,2012, pp.145-164. Citations:
 2
- 28. Roy, S., "Urban Water-Bodies and Wetlands: Management Needs and Challenges in Indian Cities,"SPANDREL, Journal of School Planning and Architecture, Bhopal, Issue 2, Spring 2011, pp.2-9.
- 29. Roy, S., "Protected Area Governance in Thailand: Issues, Challenges and Institutional Responses," Local Environment- The International Journal of Justice and Sustainability, 9(05), 2011, pp.97-103
- Mitra,S., Paul, S.K., and Roy, S., "Fusion Elements in Provincial Style of Islamic Architecture in Medieval Bengal," ABACUS (A Bi-Annual Internationally Refereed Journal on Architecture, Conservation and Urban Studies), Vol.6, No.1 (ISSN: 0973-8339), Spring 2011, pp.86-94.
- Paul, S.K., "A Network Utility Based Approach for Deciding Bridge Location in Urban Areas," International Journal of Civil Engineering Applications Research (IJCEAR), Vol.2, Issue 2 (ISSN:2249-653X), 2011, pp.93-101.
- Jain, S. K., Mitra K., Kumar M., and Shah, M., "A Proposed Rapid Visual Screening Procedure for Seismic Evaluation of RC Frame Buildings in India", Earthquake Spectra, Volume 26, No. 3, 2010, pp.709-729, Impact Factor: 3.744, Citations: 26.
- 33. Mukhopadhyay P., Goswami, K., Chatterjee, P., Mandal, U., Bala, S., and Dutta, S. C. "An attempt towards modeling the behaviour of masonry element under lateral loading with limited experimental verification." The Bridge & Structural Engineer, ING-IABSE, Vol. 40, No. 1, 2010, pp. 1-23, Citations: 2.

- Mukhopadhyay, P., and Dutta, S. C. "Performance of Sidr affected a Few Typical Nonengineered Buildings at the Ganges Delta." IABSE Symposium Report, IABSE, Vol. 96, No. 1, 2009, pp. 10-19
- 35. Mukhopadhyay, P. "Role of bamboo in seismic architecture." Indian Architect and Builder, Jasubhai Media, Vol. 22, No. 2, 2008, pp. 102-106.
- 36. Mukhopadhyay, P. "Planning for primary education in Bally municipality, West Bengal: The KUSP experience." ITPI Journal, Institute of Town Planners, India, Vol. 5, No. 3, 2008, pp. 27-42.
- 37. Mukhopadhyay, P., Mukhopadhyay, R., and Sarkar, B. L. "Flood and storm resistant two-storied bamboo house on stilts: Reporting of the first trial unit at the building centre of Birati, West Bengal." Thought – a socio-technical round-up, FOSET, Vol. 12, No. 3, 2008, pp. 39-44.
- Mukhopadhyay, P. "Performance of buildings during earthquake configurational aspects." Journal of the Institution of Engineers (India), Arch. Eng. Div., Institution of Engineers (India), Vol. 88, No. 27, 2007, pp. 13-17.
- 39. SarkarA, Bandyopadhyay A, Roy A, "Participatory Planning Process: The KUSP Model of West Bengal", Journal of Institute of Town Planners' India, Vol.4, No. 4, 2007, p 56-60.
- 40. Mitra, S., Paul, S.K., "Exploring Possibilities of Roof-Top Rain Water Harvesting Technology As An Alternative Source of Drinking Water In Arsenic Affected Areas In West Bengal", Thought, XII(III), 2007, pp.45-48,
- 41. Mitra, K., "Strategies for Managing Seismic Risk: A Road Map for Kolkata", Kindler. Journal of the National Institute of Management, Calcutta, Vol. VI, No. 1, 2006,pp.7-21.
- 42. Mitra, S., Roy, S., "Methodology for Assessment of Tourism Potentials: A Case Study of Kolkata Metropolitan Area", Journal of Institute of Town Planners, India, Vol. 2, No. 4, 2005, pp.55-62.
- 43. Paul, S.K., Roy, S., "Urban design Framework for Heritage Tourism Complex- Murshidabad", Indian Architect and Builder, 18 (05), 2005, pp. 66-71.
- 44. Roy, S., "Protecting India's Forests: The Effectiveness of Forest Protection Committees- A Case Study of Southern West Bengal, India", International Journal of Sustainable Development and World Ecology, 12 (01), 2005, pp.68-76.
- 45. Roy, S., "Forest Protection Policies and Local Benefits from NTFP- Lessons from West Bengal", Economic and Political weekly, vol. 39 (06), 2004, pp.587-591.

- 46. Mitra, K., "Architecture and the Social Sciences-Towards a people oriented approach to architectural design practice", Archi Design Perspective, Vol. I, Issue 9-10, 2003, pp 47-50.
- 47. Roy, S., "Joint Forest Management in West Bengal- A Game Theoretic Critique", Indian Journal of Environmental Protection, 22(6), 2002, pp-707-716
- 48. Sarkar, A, "Planning At Municipal Level: A GIS Approach," Quarterly Issue of All India Institute of Local Self Government, Vol. LXXI, No. 1-2, Jan-June 2001, pp. 21-26.
- 49. Sarkar, A., "An Alternative Approach Towards Making Cities Safer: An Agenda for Action." Nagarlok (Urban Affairs Quarterly), Vol. XXXIII, No 2, April-June 2001, Center for Urban Studies, IIPA, New Delhi, pp. 42-50.
- 50. Mukhopadhyay, P. "Engineering and technological education in West Bengal at the cross roads of a new millennium.", Thought a socio-technical round-up, FOSET, Vol. 4, Nos. 2 & 3, 2000, pp. 15-23.
- 51. Sarkar A, "Remote Sensing & GIS application on Residential Site Suitability Analysis: A Case Study of Dehradun Urban Agglomeration.", Geo-Informatics Division, Indian Institute of Remote Sensing, ISRO: Dehradun, 1999.
- 52. Sarkar, A., "Towards a Comprehensive Town & Regional Planning Legislation in Sates.", Journal of the All India Institute of Local Self Government," Vol. LXVI No.1 Jan-Mar 1995, pp. 10-15.

CONFERENCE PROCEEDINGS

- Jain, S.K., Brzev, S., Basu, D., Rai, D.C. and Mitra, K., "Confined Masonry Construction for Improved Seismic Safety of Buildings in India," Proceedings of the International Conference on Emerging Building Materials and Construction Technologies, New Delhi, Building Materials and Technology Promotion Council, Ministry of Housing and Urban Poverty Alleviation, Government of India, March 21-22, 2016, pp. 225-235.
- Roy, S., "Climate Proofing of Indian Cities: Need for Paradigm Shift in Urban Development", Proceedings of the International Symposium on "Livable Habitat and Sustainable Infrastructure: A Key to Smart Growth" published by IIT, Kharagpur, 2016, pp. 34-46.
- 3. Ghosh, K., &Sarkar, A., "Water Sensitive Urban Planning using Live Systems for Urban Wastewater management: The Vetiver Approach," Proceedings of the National Workshop on Mission Ganga: Urban Planning Perspectives, Institute of Town Planners, India, August 8, 2015
- 4. Roy, S., "Climate Vulnerability and Adaptation Experience of Megacities in Asia", Proceedings of the Asian University Network Forum on Advances in Research, published by Aichi Gakuin University, Japan, 2015, pp. 37-48.

- Roy, S., "Smart Cities-India's New Urban Agenda?" Proceedings of the International Symposium on "Urban Quest South Asia" published by South Asia Urban Forum, Colombo, Sri Lanka, 2015, pp. 27-39
- Banik, G.C., Paul,S.K., and Roy, S.K., "A Network-Efficiency Based Approach for Benchmarking of Transportation Connectivity Indices: Few Case Studies from Indian Scenario," Proceedings of the 36th Indian Geography Congress (ISBN 978-93-85215-03-2), 2014, organized by National Association of Geographer, India(NAGI), Jaipur, November 17- 20, 2014, pp.400-416.
- Roy, A., Paul, S.K., Roy, S.K., "A Study of Settlement Hierarchy & Road Connectivity Parity: Case studies from Cities in Seven Sister States of India", Proceedingsof the 36thIndian Geography Congress (ISBN 978-93-85215-03-2), 2014, organized by National Association of Geographer, India(NAGI), Jaipur, November 17- 20, 2014, pp.395-400.
- Joti, S. & Mitra, K., "Performance of masonry monasterystructures in the M 6.9 Sikkim (India-Nepal border)Earthquake of 18 September, 2011:: A lesson", 2nd European Conference in Earthquake Engineering and Seismology, Istanbul, Turkey. August 24-29, 2014.
- 9. Biswas S., Roy A., and Neogi S., "Study on the Impact of Thermal Inertia on Building System Performance", Proceedings of the National Symposium on Sustainability and the Built Environment: Searching for Synergies, Bengal Engineering and Science University, Shibpur, INDIA, Feb.21-22, 2014.
- Joti, S. & Mitra, K., "Sustainable Technologies Used In Vernacular Earthquake Resistant Structures'. Proceedings of the National Symposium on Sustainability and the Built Environment: Searching for Synergies, Kolkata, 2014, pp 29-36
- 11. Basak, S. and Sarkar, A., "Comparison of building codes supporting energy efficiency in residential area of various Asian countries (China, Japan, Singapore, Thailand, Myanmar, Sri Lanka, Philippines, Malaysia)", proceedings of National Symposium on sustainability and the built Environment : searching for synergies organized by Dept. of Architecture, Town & Regional Planning, Bengal Engineering and Science University, Shibpur, February 21-22, 2014
- 12. Ghosh, K., &Sarkar, A., "Urban grey water management: Approaches in sustainability", National Symposium on Sustainability and the Built Environment: Searching for Synergies, Bengal Engineering and Science University, Shibpur, India, February 22-23, 2014
- 13. Ghosh, K. and Sarkar, A., "Urban water management: Approaches in sustainability", proceedings of the National symposium on "Managing lands in urban fringes – controlling urban sprawl" organized by Indian Institute of Town Planners West Bengal Chapter, December 7, 2013, pp 97-101

- 14. Roy, S., "Green Economy in Canada and Transition to a Low Carbon Future: Role of Green Building and Green Infrastructure", Proceedings of the International Conference on "Engage Canada: Emerging Priorities for Sustainable Partnerships" published by Shastri Indo-Canadian Institute, New Delhi, 2013, pp 18-27
- 15. Roy, S., "Evolving Role of Aboriginal People in Governance of Protected Areas in Canada through the Lens of Protected Area Governance in India: Lessons for Policy Advocacy and Action Research", Proceedings of the International Conference on "Engaging Canada: Emerging Priorities for Sustainable Partnerships" published by Shastri Indo- Canadian Institute, New Delhi, 2013, pp-19-33
- 16. Roy, S., "Natural Resource Management in Cities: A Key to Sustain People and Places through Ecotourism", Proceedings of International Urban Design Conference on Cities, People and Places, University of Moratua, Sri Lanka, 2013, pp 453-469
- Basak, S. and Sarkar, A., "The energy concern for housing in India, proceedings of the National symposium on 'Managing lands in urban fringes – controlling urban sprawl'" organized by Indian Institute of Town Planners West Bengal Chapter, December 7, 2013, pp 102-104
- 18. Sarkar, A., "Realism, Idealism an Pragmatism in Sustainable Development", proceedings of the conference titled '1st National Seminar on Role of Engineers in Sustainable Development' organized by The Institute of Engineering and Technology (India), Kolkata December 29, 2013
- Mitra, S. and Bhattacharya, D.B., 2013, "MakingSiliguri a walkable city", Procedia Social and Behavioural Sciences 96 [13th COTA International Conference of Transportation Professionals (CICTP 2013)][Available in: www.sciencedirect.com], 2013, pp2737-2744,.
- 20. Murty, C.V.R., Rai, D.C., Kumar, H., Mitra, K., Bose, A.K., Kaushik, H.B., Kumar, R.P., Jaiswal, A., "A Methodology for documenting Housing Typologies in the Moderate-Severe Seismic Zones.", Proceedings of the 15th World Conference on Earthquake Engineering. Lisbon, Portugal, September 24-28, 2012, CD Paper ID: 0081
- 21. Roy, S., "Urban Wetland Conservation and Management: An Economic Valuation Approach", Proceedings of the Fifth World Aqua Congress, Bhopal, 2011, pp 323-334.
- 22. Jain, S.K., Mitra, K., Kumar, M., and Shah, M., "A Rapid Visual Seismic Assessment Procedure for RC Frame Buildings in India", Proceedings of the Ninth U.S. National and Tenth Canadian Conference on Earthquake Engineering, CD-ROM, Paper No. 972, Toronto, Canada, 25-29 July 2010
- 23. Dutta, S. C., Mukhopadhyay, P., and Goswami, K. "Improving seismic performance of brick masonry junctions." Jt. Conf. Proc., 7th Int. Conf. on Urban Earthquake Eng. and 5th Int. Conf.

on Earthquake Eng., K. Kasai, Chair, eds., Center for Urban Earthquake Eng., Tokyo Institute of Technology, Japan, Mar 3-5, 2010,pp 1745-1751.

- 24. Sanyal, M.K., Gupta, A., Mukherjee, S., Roy, S., Paul, S.K., "Carrying Capacity Based Development Plan-A Tool for Sustainable Urban Planning and Management: A Case Application for a Typical Municipal Town in India" – 2ndXiemen Forum on Urban Environment, Xiemen (Amoy), China, December 11-13, 2010, pp. 33-42.
- 25. Roy, S., "Developing a Behavioural Model for Past and Future of Bengal Sunderban Deltaic Islands", Proceedings of the First Joint International Conference of IGCP 588/INQUA Coastal and Marine Process Commission in Hong Kong, 2010, pp 67-79.
- 26. Roy, S., "The Cyclone Disaster in Sunderban and the Possibilities of Rehabilitative Planning for Affected Communities", Proceedings of the International Conclave on "Local-Global Cooperation towards Refugees, Displaced Persons and Environmental Migrants: Assessment, Responses and Challenges" published by Institute of Policy Studies, Aichi Gakuin University, Aichi, Japan, 2009, pp 35-44.
- 27. Mukhopadhyay, P., Dutta, S. C., and Bhattacharya, S. "Lessons learnt from the impact of Sikkim 2006 earthquake on heritage structures." Proc., 3rd Greece-Japan Workshop: Seismic Design, Observation, Retrofit of Foundations, G. Gazetas, Y. Goto, and T. Tazoh, eds., Lab. of Soil Mech., National Technical University of Athens, Greece, Sep 22-23, 2009, pp 615-628.
- 28. Mitra, K., "A Proposed Rapid Visual Screening Procedure for Seismic Evaluation of RC Frame Buildings in India", Proceedings of the WCCE-ECCE-TCCE Joint Conference on Earthquake and Tsunami by the European Council of Civil Engineers (ECCE), Turkish Chamber of Civil Engineers (TCCE), and World Council of Civil Engineers (WCCE), Istanbul, Turkey, 22-24 June, 2009, pp 55-56.
- 29. Mitra, K., "Proposed Rapid Visual Screening for Seismic Evaluation of RC frames buildings in India," Proceedings of the Second India Disaster Management Congress, VigyanBhavan, New Delhi, 2009, pp 16-24.
- 30. Mitra, K., "Safety in the built environment vis-à-vis Seismic vulnerabilities of some common urban architectural features", Proceedings of the Conference of the South Asian Association of Regional Cooperation of Architects (SAARCH 2008), New Delhi, 2008, pp. 18-21.
- Mukhopadhyay, P., Goswami, K., Chatterjee, P., Mondal, U., Bala, S., and Dutta, S. C. "Behaviour of brick masonry under reversible cyclic loading." Proc., All India Seminar on Emerging Trends in Civil Eng. Materials, ASCE – India Section, and ICE (UK) – India (Eastern Region), Kolkata, India, Dec 5-6, 2008,pp 1-7.

- 32. Mitra, K., "Urban earthquake vulnerability: Revisiting some common interpretations of building rules in urban areas", Proceedings of the International Conference on Construction: Managing Seismic Risk organized by the Construction Industry Development Council, New Delhi, 2008, pp 295-302.
- 33. Roy, S., Mitra, S., Paul, S.K., "Tenure Security and Quality of Life in Urban Slums: Case Studies in Kolkata Metropolitan Area", Proceedings of 36TH World Congress on Housing Science published by International Association for Housing Science, Florida and IIT Kharagpur, India, 2008, pp 1-10.
- 34. Sarkar, A., "Defining Scope of Peri-Urban Development in an Environmentally Constrained Paradigm: A case of East Kolkata", proceedings of the National Town and Country Planning Congress organized by Institute of Town Planners, India held at Kolkata during 18-20 December, 2007.
- 35. Sarkar, A., "GIS enabled Urban Planning with High Resolution RS data for Urban Fringe", proceedings of the conference titled National Conference organized by Indian Institute of Remote Sensing, Dehradun, held at Kolkata, 20-22 December, 2007.
- 36. Sarkar A., "Planning At Municipal Level: A GIS Approach", Quarterly Issue of All India Institute of Local Self Government, Vol. LXXI, No. 1-2, New Delhi, Jan-June 2001, pp 21-26.
- 37. Mitra, K., "Conceptualizing the Architecture-Earthquake Resilience Interface in Architectural Practice", Proceedings of the In CD ROM Proceedings of the National Workshop on Earthquake Resistant Design for the Built Environment, Kolkata, 2006, pp2.2.1-2.2.10.
- Pal, T. and Mukhopadhyay, P. "Renewal of Raniganj bazaar area, Bardhaman." Proc., 5th AIPTC, Shelter sub-congress, FOSET, DST & NES-GoWB, and, DHE-GoWB, Kolkata, India, Feb 19–20, 2005, pp 18-23.
- 39. Sarkar A. &Bansal P., "An Appraisal of Rural Rehabilitation Schemes A Case of Dokra Artisans at Dariapur", proceedings of the conference titled 5th All India Peoples' Technology Congress, Kolkata, organized by FOSET, February 19-20, 2005
- 40. Sarkar, A., "The Course Structure in Planning in the light of recent advances in Science and Technology", proceedings of the conference titled National Seminar on Architecture and Planning Education and Profession Changing Dimensions and Future Direction in 21st Century organized by Bengal Engineering College (DU), Howrah, February 6-7, 2004.
- 41. Halder, S. and Mukhopadhyay, P. "The changing dimensions: Towards an appropriate curriculum for architecture." Proc., National Sem. on Architecture and Town Planning Education

and Profession – Changing Dimensions and Future Direction in 21st Century, Dept. of AT&RP, Bengal Engineering College (DU), India, 6-7 Feb 2004, pp SH & PM-1 to SH & PM-10.

- 42. Mukhopadhyay, P. "New development challenges towards a holistic technical education policy for West Bengal." Proc., National Sem. on Architecture and Town Planning Education and Profession – Changing Dimensions and Future Direction in 21st Century, Dept. of AT&RP, Bengal Engineering College (DU), India, 6-7 Feb 2004, pp. PS-1 to PS-10
- 43. Sarkar, A., "Mapping and Monitoring of Wetlands of East Kolkata with Multi-Temporal RS Data and GIS Approach", proceedings of the conference titled International Society for Photogrammetry and Remote Sensing (ISPRS) Working Group 8/3 International Workshop organized by Center of Earth Science, Kerala, held at Thiruvananthapuram, Kerala, December 12-16, 2003.
- 44. Sarkar, A., "A Methodology for Development Planning for Small and Medium Sized Towns with RS & GIS Approach", proceedings of the conference titled 4th All India Peoples' Technology Congress organized by FOSET, Kolkata, held on February 22-23, 2003
- 45. Sarkar, A., "Eco-tourism as a suggestive model for future growth of Digha as a tourist destination town of coastal West Bengal", proceedings of the conference titled Development of Digha as a Tourist Destination, organized by Institute of Town Planners India held at Digha, West Bengal on March 7, 2003
- 46. Sarkar, A., "Aesthetics and Built Form: The Unison of Interior and Exterior", proceedings of the conference titled All India Seminar on Innovative Ideas in Interiors and Exteriors of Buildings, organized by Institute of Engineers (India) held at Kolkata, on November 14-15, 2003
- 47. Mitra, K., "Architecture and the Social Sciences—Towards a People Oriented Approach in Architectural Design", CD ROM Proceedings of the Four Faces Conference, Stockholm-Helsinki, May 8-11, 2003.
- 48. Mukhopadhyay, R., Roy, M. B., Sarkar, B. L., and Mukhopadhyay, P. "Storm, flood and earthquake resistant value engineered bamboo housing for the EWS." Proc., National Workshop on Alternative Building Methods (NWABM – 2002), , K. S. Jagadish and K. S. NagarjundaRao, eds., Dept. of Civil Eng., Indian Institute of Science, Bangalore, India, Jan 16-18, 2002, pp 1-16
- 49. Sarkar, A., "Integration of GIS in Micro Level Planning at Panchayat System of Governance: A Case Study from West Bengal, India", proceedings of the conference titled National Seminar on GIS Application in Micro Level Planning organized by National Institute of Rural Development, Hyderabad, held on August 7-8, 2002

- 50. Sarkar, A., "Urban Development, Emerging System of Governance and Evolving Information Technology in India", proceedings of the conference titled 49th National Town & Country Planning Congress, organized by Institute of Town Planners' India, Hyderabad, held on February 5-7, 2001
- 51. Mukhopadhyay, R., Roy, M. B., Sarkar, B. L. and Mukhopadhyay, P. "Value added design of group housing system for EWS living in flood-prone areas." Proc., Third AIPTC, Shelter sub-congress, Feb 9-11, 2001, FOSET, Kolkata, India, pp. 42-49.
- 52. Mukhopadhyay, R., Mukhopadhyay, P. and Saha, S. "Preservation of bamboo: Outcome of field experience & experiments." Proc., Third AIPTC, Shelter sub-congress, FOSET, Kolkata, India, 9-11 Feb 2001, pp 11-15.
- 53. Mitra, K., "Facilitating Facility Planning Through Design Guides", Proceedings of the 5th International Conference on Design and Decision Support Systems in Architecture and Urban Planning (ISBN 1-4020-2408-8), Nijkerk, Netherlands, 2000, pp 204-214.
- 54. Mukhopadhyay, P. "Integrated rural development planning process: The experience of Rajnagar block, Birbhum." Proc., 2nd AIPTC, Habitat sub-congress, FOSET, Kolkata, India, Feb 12-14, 1999, pp 443-451.
- 55. Mukhopadhyay, R. and Mukhopadhyay, P. "Door and window fabrication by bamboo", Proc., 2nd AIPTC, Habitat sub-congress, FOSET, Kolkata, India, Feb 12-14, 1999, pp 419- 423.
- 56. Bandyopadhyay, A. Roy S., Sarkar, A., "Urbanization in West Bengal in the context of Industrial Resurgence - Issues & Prospects", proceedings of the conference titled Industrial Resurgence and Urban Development Prospects in West Bengal, organized by Bengal Engineering College, Howrah, held on March 1997.
- 57. Sarkar A., "An approach Towards Legislative Reforms for the State of West Bengal in the light of Constitution Amendment", proceedings of the conference titled Urbanization Policy in West Bengal in the 21st Century organized by Center for Urban Economic Studies, Calcutta University held at Kolkata, December 1997.
- 58. Sarkar A., "Decentralized Planning & Development: Needs for Legislative Reforms with respect to CMA", proceedings of the conference titled Direction of Future Development of Calcutta & Howrah Metropolises, organized by Bengal Engineering College, Howrah, held on March 7, 1995.
- 59. Sarkar A., "Planning at Municipality level in the Context of 74th Constitution Amendment", proceedings of the conference titled Municipal Administration and 74th Constitution

Amendment, organized by Center for Urban Economic Studies, Calcutta University, Kolkata, held on June 10-11, 1995.

- 60. Mitra, K., "Design for Effective Design Guides: Development of a Conceptual Framework for Analyzing Design Guides," Proceedings of the 26th Annual Conference of the Environmental Design Research Association (EDRA), Boston, USA, 1995.
- 61. Mitra, K. & Halder, M, "Industrial Resurgence and Urbanization: An Environmental Perspective," Proceedings of the Workshop on Industrial Resurgence and Urban Development prospects in West Bengal, Kolkata, 1997.
- 62. Saha, S., "Role of industrial resurgence in achieving decentralized urbanization pattern", workshop jointly organized by B.E. College & ITPI, 1997.
- 63. Saha, S., "Environmental quality determinant of new settlement morphology for an existing metropolis Case Study of Kolkata", Environmental studies, School of Planning & Architecture, New Delhi, 1997.
- 64. Saha, S., "Sustainable economic development in Indian scenario", IIED conference in Swedish School of Economics Helsinki, 1995.
- 65. Saha, S., "Towards strategy formulation for resource utilization, Industrial development and conservation of Himalayan range in West Bengal", National Town Planning Seminar in Coimbatore, 1994.
- 66. Saha, S., "Highrise buildings in Metropolitan Cities" Result of urban dynamism (case study Calcutta), All India conference on tall buildings, Institute of Engineers, Roorki local centre, 1993.
- 67. Saha, S., "Present practice of Master Planning approach in West Bengal A critical study",40th ATCP Seminar, Pune, 1992.
- 68. Saha, S., "Planning for environ in a metropolis A case study of Kolkata", ITPI Journal on the occasion of 39th National seminar,Kolkata, 1991.

BOOKS AND BOOK CHAPTERS

1. Mukhopadhyay, P. and Dutta S. C. "Indian Cyclones and Earthquakes: Their Impact on Structures." In Encyclopedia of Natural Hazards, Taylor and Francis Group, Boca Raton, United States (accepted), 2016

- Mitra, K. "The Calcutta Chronicles. From Calcutta to Kolkata". In Geropanta, V & E. Lucantoni (eds) Projects For: Kolkata The regeneration of the Hooghly riverfront. Aracneeditriceint. le SRL, Rome. ISBN: 978-88-548-8550-9.June 2015.
- 3. Roy, S., "Architectural Design, The Bloomsbury Encyclopedia of Design", Bloomsbury Publishing (ISBN 9781472521576),2015, pages 49-56
- 4. Paul, S.K., "Transit Oriented Development", The Bloomsbury Encyclopedia of Design, Bloomsbury Publishing (ISBN 9781472521576),2015, pages 330-331
- Mitra, S., Roy, S., Roy, S.K., Sanyal, M.K., "Land Use and Infrastructure Development Strategy for Planned Transformation of Bally-Howrah-Uluberia Planning Area, Urban Development in Howrah: Socio-Economic Perspectives", Book Chapter, PRIMUS Books Publishers, ISBN 978-93-84082-39-0, 2015, pp-304-312.
- Murty, C.V.R., Kumar, H., Mitra, K., Rai, D.C., Bose. "A Methodology for documenting Housing Typologies in the Moderate-Severe Seismic Zones of India". Building Materials and Technology Promotion Council Ministry of Urban Development and Poverty Alleviation New Delhi, 2012.
- 7. Dutta, S. C., and Mukhopadhyay, P. "Improving earthquake and cyclone resistance of structures: Guidelines for the Indian subcontinent", TERI, New Delhi, India, 2012
- Roy, S., Mitra, S., "Eco-development and Biodiversity Conservation Case Study Sunderban Biosphere Reserve, West Bengal", Book Chapter 11, Insights from the field: Studies in "Participatory Forest Management in India", Supported by Ford Foundation under the RUPFOR Project, Winrock International India, 2008, pp-221-248
- 9. Mukhopadhyay, P. "Technology innovations." In Bamboo in construction, Housing and Urban Development Corporation (HUDCO), New Delhi, India, 2005,pp. 35-37
- 10. Guha, S., Roy, G., Chattopadhyay, G., Sengupta, N., Mukhopadhyay, P., and Rakshit, D. (Ed. Bd.) "Bigyan O Prajukti: JyotiBasu'rBhabna", FOSET, Kolkata, India, 2000
- 11. Roy, S., "Ecological Sustainability and Metropolitan Development- the Calcutta Experience", Article in the Book on "Waste Recycling and Resource Management in Developing World" published by University of Kalyani and International Ecological Engineering Society, Switzerland, 2000, pp 293-302
- Weisman, G.D., Cohen, U., Mitra (Ray), K., and Day, K. "Architectural Planning and Design for Dementia Care Units". Chapter V in Coons, D. (Ed.) Specialized Dementia Care Units. Baltimore, MD: Johns Hopkins University Press, 1991

TECHNICAL REPORTS

- 1. Murty, C.V.R, Mitra. K, Sarkar. A, and Kumar. H. "Documentation of Amethi disaster resilient appropriate technology Housing project." Building Materials and Technology Promotion Council, Government of India, 2012.
- Roy, S., "Protected Area Governance in Canada: Evolving Role of Aboriginal People and Challenges for Conservation", Research Monograph, Department of Geography, University of Victoria, Canada, 2012, pp-1-30
- 3. Holmes, W.T., Rodgers, J.E., Mitra. K and Kumar. H. "Seismic vulnerability assessment of Nonstructural elements at Bir Hospital, Kathmandu." South East Asia Regional Office of the World Health Organization, GeoHazards International, Palo Alto, California, 2012.
- 4. Holmes, W.T., Rodgers, J.E., Mitra. K and Kumar. H. "Seismic vulnerability assessment of Nonstructural elements at KantiChildren's Hospital, Kathmandu." South East Asia Regional Office of the World Health Organization, GeoHazards International, Palo Alto, California, 2012.
- 5. Holmes, W.T., Rodgers, J.E., Mitra. K and Kumar. H. "Seismic vulnerability assessment of Nonstructural elements at Paropakar Maternity Hospital, Kathmandu." South East Asia Regional Office of the World Health Organization, GeoHazards International, Palo Alto, California, 2012.
- Mitra. K and Kumar. H. "Documentation of retrofitting of MCD primary School, Lajpat Nagar." Building Materials and Technology promotion Council, Government of India, 2011.
- 7. Mitra. K and Kumar. H. "Documentation of retrofitting of MCD primary School, VivekVihar." Building Materials and Technology promotion Council, Government of India, 2011.
- Roy, S., Mitra, S., Sanyal, M.K., (2011), 'Aila' the cyclone disaster in Sunderban and the possibilities of rehabilitative planning for affected communities, Working Paper Series 31, Series IV Securing Rights of Forced Displacees through Global Obligations, Universal Declarations and Local Means, Aichi Gakuin University, Japan.
- 9. Mukhopadhyay, P., and Dutta, S. C. A reconnaissance based vulnerability and damage survey report at the Khulna and Barisal divisions of Bangladesh: Effect of the Cyclone Sidr of 15th

November 2007, Bengal Engineering and Science University, Shibpur, India, 2008, doi: 10.13140/RG.2.1.1145.7441.

- Mukhopadhyay, P. and Dutta, S. C. A reconnaissance based vulnerability and damage survey report at the Sagar Islands, West Bengal: Effect of the Cyclone Sidr of 15th November 2007, Bengal Engineering and Science University, Shibpur, India, 2007, doi: 10.13140/RG.2.1.1014.6726. Citations: 2.
- 11. Dutta, S. C., Guha, A. L., GuhaNiogi, J., and Mukhopadhyay, P. (2006). A reconnaissance based vulnerability and damage survey report: The Sikkim Earthquake of 14th February 2006, School of Community Science and Technology, Bengal Engineering and Science University, Shibpur, India, 2006, doi: 10.13140/RG.2.1.4160.4002.
- 12. Roy, S., "Planning and Management of Protected Areas Lessons from the Experiences of Thailand", Research Monograph, Asian Institute of Technology (AIT) Thailand, 2005, pp.1-40.
- 13. Roy, S., "Joint Forest Management and Its Impact on the Forest Fringe Economy, Research Monograph titled "Reconciling Environment and Economics: Executive Summaries of EERC Projects", 2003, pp. 66-70.
- 14. Roy, S., "Joint Forest Management and Forest Protection Committees: Negotiation Systems and the Design of Incentives", Research Monograph, World Bank, MOEF (GOI) and IGIDR (Mumbai), 2003, pp.1-60.
- Chattopadhyay, B. C., Das, M. C., Roy, S., Gan, S., Ghosh, D., Mukhopadhyay, P., Gupta, D., Das, S. "Revitalization of Kalyani the agenda for action: Report I Resource inventory & revitalization policy", Forum of Scientists, Engineers and Technologists, India, 1998.
- Chowdhury, P. N., Roy, S., Chattopadhyay, D., Chakaraborty, S., Mukhopadhyay, P., Mukherjee, P. K., Roy, C., Biswas, K., Sinha, S., Ghosh, S. P. "Perspective plan for integrated development of a Gandhi block Rajnagar – Birbhum", Forum of Scientists, Engineers and Technologists, India, 1998.
- Cohen, U., Weisman, G.D., Mitra (Ray), K., Day, K, "Environments for People with Dementia: A Regulatory Analysis," Washington DC: Health Facilities Research Program, of the American Institute of Architects and the Association of Collegiate Schools of Architecture, 1989.
- 18. Cohen, U., Weisman, G.D., Mitra (Ray), K., Steiner, V., Rand, J., and Toyne, R., "Environments for People with Dementia: Case Studies." Washington DC: Health Facilities Research Program, of the American Institute of Architects and the Association of Collegiate Schools of Architecture, 1988.

19. Cohen, U., Weisman, G.D., Mitra (Ray), K., Steiner, V., Rand, J., and Toyne, R., "Environments for People with Dementia: Design Guide." Washington DC: Health Facilities Research Program of the American Institute of Architects and the Association of Collegiate Schools of Architecture, 1988.

PATENTS

- Mukhopadhyay, R. and Mukhopadhyay, P. "Process for Preservation of Bamboo for Structural Application and Preserved Bamboo Thus Processed." Indian Patent, Application No. 1220/Kol/2011. Filed on 19 Sep 2011.
- 2. Mukhopadhyay, R. and Mukhopadhyay, P. "Improved Vertical Axis Wind Electricity Generator-Cum-Wind Water Pump." Indian Patent No. 202555. Granted on 02 Mar 2007.

School of Mechatronics & Robotics

PUBLICATIONS

Journals

- 1. Srijan Bhattacharya, Ritwik Chattaraj, Arindam Patra, Mallar Das, Bikash Bepari and Subhasis Bhaumik, "Simultaneous Parametric Optimization of IPMC Actuator for Compliant Gripper", International Journal of Precision Engineering and Manufacturing, International Journal of Springer, Vol. 16, No. 11, October 2015, pp. 312–325. Impact Factor: 1.205, Citations: 0
- Srijan Bhattacharya, Bikash Bepari and Subhasis Bhaumik, "IPMC Actuated Compliant Mechanism Based Multi-Functional Multi-Finger Micro-Gripper", Mechanics based Design of Structures and Machines, International Journal of Taylor & Francis, Vol. 42, Issue 03, May 20, 2014, pp. 312–325. Impact Factor: 0.842, Citations: 4
- Dilip K Biswas, Subhasish Bhaumik, Jyotirmoy Saha, "Kinematic Navigation of Modular Robot", International Journal of Engineering and Innovative Technology (IJEIT), Vol. 2, Issue 6, pp. 27 – 37, December 2012,
- Dilip Biswas, Subhasish Bhaumik, Jyotirmoy Saha, "On the Kinematics of Hyper Redundant Mobile Robot", International Journal of Scientific & Engineering Research (IJSER), Volume 4, Issue 2, February 2013, ISSN 2229 – 5518
- Anirban Chowdhury, Souvanik Pathak, Dr. Subhasis Bhaumik, "An Earthworm like Mobile Robot with Active Surface Gripping Mechanism for Bi- directional Movement" International Journal of Systems, Algorithms & Applications (IJSAA), Volume 2, Issue 10, October 2012, ISSN Online: 2277-2677

- Soumya Manna, S Bhaumik, "A Bio-inspired 10 DOF Wearable Powered Arm Exoskeleton for Rehabilitation" Special issue: Rehabilitation Robotics 2013, Hindawi Publishing, Journal of Robotics, Volume 2013, Article ID 741359
- 7. Oishee Majumder, Ananda Sankar Kundu, Subhasis Bhaumik, "Towards Active Walking from Compass Gait: Stability and Hip Torque Requirement for Level Ground Walking", International Journal of Biomechatronics and Biomedical Robotics, Inder science (IJBBR-101348).

Conferences

- O. Mazumder, A. S. Kundu, R.Chattaraj, P.k.Lenka and S.Bhaumik, "Development of Series Elastic Actuator based Myoelectric Knee Exoskeleton for Trajectory Generation and Load Augmentation", AIR Goa-15, July 02 - 04, 2015
- 2. O. Mazumder, A. S. Kundu, R.Chattaraj, P.k.Lenka and S.Bhaumik, "Modeling, Simulation and Control Architecture for Lower Limb Active Exoskeleton AIR Goa-15, July 02 04, 2015
- 3. A. Kundu, O. Mazumder, R. Chattaraj and S. Bhaumik "Trajectory Generation for Myoelectrically Controlled Lower Limb Active Knee Exoskeleton", IEEE Proceedings International Conference on Contemporary computing, Jaypee Institute of Technology, Noida, India, August 20-22, 2015.
- 4. O. Mazumder, A. Kundu, R. Chattaraj and S. Bhaumik, "Door Negotiation of a Omni Robot Platform Using Depth Map Based Navigation in Dynamic Environment ", IEEE Proceedings International Conference on Contemporary computing, Jaypee Institute of Technology, Noida, India, August 20-22, 2015.
- 5. O. Mazumder, A. Kundu and S. Bhaumik, "Generating Gait Pattern of Myoelectric Active Ankle Prosthesis", IEEE Proceedings of 2014 RAECS UIET Punjab University Chandigarh, Chandigarh, India, March 6-8, 2014. Citation: 1
- 6. A. Kundu, O. Mazumder, R. Chattaraj and S. Bhaumik, "Close Loop Control of Non-Holonomic WMR with Augmented Reality and Potential Field", IEEE Proceedings of 2014 RAECS UIET Panjab University Chandigarh, Chandigarh, India, March 6-8, 2014. Citation: 1
- A.Kundu, O. Mazumder, R. Chattaraj and S. Bhaumik, "Holonomic Wheelchair Control using EMG signal and Joystick Interface", IEEE Proceedings of 2014 RAECS UIET Punjab University Chandigarh, Chandigarh, India, March 6-8, 2014.
- **8.** O. Mazumder, A. Kundu, and S. Bhaumik, "Development of Wireless Insole Foot Pressure Data Acquisition Device", IEEE Proceedings of 2012 International Conference on Communication, Devices and Intelligent Systems, Jadavpur University, India, December 27-28, 2012. Citation: 7
- O. Mazumder, A. Kundu and S. Bhaumik "Design of Wearable, Low Power, Single Supply Surface EMG Extractor Unit for Wireless Monitoring". IPCBEE. Dubai: IACSIT Press, Singapore, 2011. International Conference on Nanotechnology and Biosensors. Vol.25, pp. 69-74. 2011. Citation: 8
- R. Ray, S. N. Shome and S. Bhaumik "Towards Dynamics and Control of an Arm-Wheel based Autonomous Stair Climbing Robotic Vehicle" ICCRC 2011 Int. Conf. on Control, Robotics and Cybernetices, 21-23 March, New Delhi, Advanced Materials Research Vols. 403-408, pp 4743-4752, 2011
- 11. Srijan Bhattacharya, Bikash Bepari and Subhasis Bhaumik, "Design of an IPMC Actuated Compliant Mechanism Based Microgripper" 10th National Conference on Industrial Problems on Machines and

Mechanisms (IPRoMM-2010), Malaviya National Institute of Technology, Jaipur, December 17-18, 2010,

- D. K. Biswas, S Bhaumik and J Saha "A Unique Path Tracking Methodology of a Rectangular Robot" 15th National Conference on Machines and Mechanisms (NaCoMM -2011), IIT Chennai, 1-2 December 2011, Machines and Mechanism, pp: 515-526, 2011
- R. Chattaraj, A. Barman, S. Bhaumik, B. Bepari "Trajectory Planning and Intelligent Control of Robotic Finger" 8th Control Instrumentation System Conference (CISCON) 2011 (International Conference) MIT Manipal, pp 510-512, 2011.
- 14. Ananda Sankar Kundu, Oishee Mazumder and Subhasis Bhaumik "Design of Wearable Surface EMG extractor for studying Torque EMG relation of Bicep muscle on Yielding Isometric Contraction" International Conference on Life Science and Technology (ICLST 2012), Hong Kong, 5 7 January, 2012.
- Sandip Nair, Subhasis Bhaumik, P. Y Nabhiraj, "Design and Development of Blimp for Aerial Surveillance" 25th National Convention of Aerospace Engineers (NCAE2011), BIT Mesra, November 04 - 05, 2011
- Soumya Kanti Manna and Subhasis Bhaumik, "Exorn A Portable Exoskeleton Device for Rehabilitation of Human Arm" Int. Conf. on Advances in Mechanical Engg. and its Interdisciplinary Areas (ICAMEI), College of Engg. & Management, Kolaghat, pp. 367-376, 2012
- 17. S. Pathak, A. Chowdhury, B. Bepari and S. Bhaumik "Study on Biomimetic Earthworm Research" Int. Conf. on Advances in Mechanical Engg. and its Interdisciplinary Areas (ICAMEI), College of Engg. & Management, Kolaghat, pp: 346-351,2012.
- Debal Saha, Ranjit Ray, and S. Bhaumik, "Dynamic Modelling of a Skid-Steered Twelve wheeled Mobile Robot using a 'slip' -'friction coefficient' relationship and its Trajectory Tracking Control" IEEE-International Conference on Advances In Engineering, Science And Management (ICAESM -2012), 2012, pp: 192-197, 2012
- 19. Soumya Kanti Manna, Devendra Kumar and Subhasis Bhaumik, "Design and Analysis of a Portable Exoskeleton Structure for Rehabilitation A Mechatronics Approach" IEEE International Conference on Research and Development Prospects on Engineering and Technology, Nagapattinam, 2013
- Anirban Choudhury and S. Bhaumik "RFID based Automated Car Theft Detection and Arresting System Immediately" IEEE International Conference on Research and Development Prospects on Engineering and Technology 2013.
- 21. Ritwik Chattaraj, Bikash Bepari and Subhasis Bhaumik, "Design and Synthesis of a Four-fingered Anthropomorphic Dexterous Robotic Hand" 1st International & 16th National Conference on Machines and Mechanisms (iNaCoMM 2013), Indian Institute of Technology Roorkee, 18-20 December, pp: 694-699, 2013
- 22. "Conceptual Design of a Powered Ankle-Foot Prosthesis for Walking with Inversion and Eversion" 2nd International Conference on Innovations in Automation and Mechatronics Engineering, ICIAME 2014, G H Patel College of Engineering & Technology, Gujrat, March 2014.
- 23. Prantik Sinha and Subhashis Bhaumik, "Design Approach for Radio-Controlled Blimp" 58th Congress of ISTAM, IIT Kharagpur & BESU Shibpur, December 2013

- 24. "Design and Development of a Multisensory System for Capturing Human Gait Pattern" National Conference on Mechatronics, Robotics and Automation (ncmra-2014), January 23–25, 2014,
- 25. Oishee Mazumder, Ananda Sankar Kundu, P K Lenka and Subhasis Bhaumik "Technologies for Lower Body Exoskeleton – Current Trends and Future Direction" National Symposium on "Challenges and Innovation in Biomedical Engineering and Assistive Technologies (NSCIBA-2014)", 23-24 February, 2014.
- 26. Ritwik Chattaraj, Srijan Bhattacharya, Bikash Bepari and Subhasis Bhaumik, "Design and Control of Two Fingered Compliant Gripper for Micro Gripping" IEEE 3rd Intl. Conf. on Informatics, Electronics & Vision, Bangladesh (ICIEV 2014), May 2014. Citation: 2
- R. Chattaraj, S. Bhattacharya, A. Roy, A. Mazumdar, B. Bepari and S. Bhaumik, "Gesture based control of IPMC actuated gripper", Recent Advances in Engineering and Computational Sciences (RAECS), 6-8 March 2014. Citation: 4
- 28. Ritwik Chattaraj, Bikash Bepari and Subhasis Bhaumik, "Grasp Mapping for Dexterous Robot Hand: A Hybrid Approach" IEEE 7th International Conference on Contemporary Computing (IC3), IC3-2014. Citation: 1
- 29. Srijan Bhattacharya, Siladitya Khan, Tanmoy Sil, Bikash Bepari and Subhasis Bhaumik, "IPMC Based Data Glove for Finger Motion Capturing" AIR Goa 15, July 02 04, 2015.
- 30. Ritwik Chattaraj, Ananda Sankar Kundu, Oishee Mazumder, Bikash Bepari and Subhasis Bhaumik, "Tele-Operation of Robot Hand Exploiting Human Hand Synergy" AIR Goa-15, July 02 - 04, 2015.
- 31. Ananda Sankar Kundu, Oishee Mazumder, Ankit Dhar, Prasanna Kumar Lenka and Subhasis Bhaumik "Occupancy Grid Map Generation using 360° Scanning Xtion Pro Live for Indoor Mobile Robot Navigation" 2016 IEEE First International Conference on Control, Measurement and Instrumentation (CMI-2016), Kolkata, January 8-10, 2016,
- Srijan Bhattacharya, Bikash Bepari and Subhasis Bhaumik, "Novel approach of IPMC actuated finger for micro-gripping" 4th IEEE Informatics, Electronics & Vision (ICIEV), 2015 International Conference, Fukuoka, Japan, 15-18 June 2015,
- Srijan Bhattacharya, Bikash Bepari and Subhasis Bhaumik, "Soft Robotic Finger Fabrication with PDMS and IPMC Actuator for Gripping" IEEE SAI Computing Conference 2016, 13-15 July 2016, London, United Kingdom (Accepted).

PATENT (Applied for - under processing)

- 1. Oishee Mazumder, Ananda Sankar Kundu, Prasanna Kumar Lenka and Subhasis Bhaumik, "An improved Robotic Ankle foot system to provide adaptive and active mobility solution for Transtibial amputees and a method for the same" Indian Patent, Application No. 201631009812 Filed on 21.03. 2016
- 2. Oishee Mazumder, *Ananda* Sankar Kundu, Prasanna Kumar Lenka and Subhasis Bhaumik, "Development and Control of Active Lower Limb Exoskeleton for Mobility Enhancement and Regeneration" (Application under processing)

Book Chapter

1. Bikash Bepari, Ranjit Ray and Subhasis Bhaumik, "Non Contact 2D and 3D Shape Recognition by Vision System for Robotic Prehension", published in the Book "Robot Vision", InTech Book, Vienna Austria, ISBN 978-953-307-077-3

- 2. Ranjit Ray, Bikash Bepari, and Subhasis Bhaumik, On the Development of an Intelligent Mobile Robotic Vehicle for Stair Navigation", published in the book "Intelligent Autonomous Systems: Foundation and Applications" published by Springer-Verlag, Germany.
- Anirudha Bhattacharjee, Bikash Bepari and Subhasis Bhaumik, "Selection of Robotic Grippers under MCDM Environment – An Optimized Trade Off Technique", Book Chapter Springer series: Soft Computing Techniques in Engineering Applications, Series: Studies in Computational Intelligence, Vol. 543, Zhong, Baojiang (Eds.) ISBN 978-3-319-04692-1
- 4. Oishee Mazumder, Ananda Sankar Kundu, Prasanna Kumar Lenka and Subhasis Bhaumik, "Technologies for Lower Body Exoskeleton – Current Trends and Future Direction", published in the book "Biomedical Engineering & Assistive Devices" published by Copal Publishing, New Delhi, ISBN: 978-93-83419-08-1
- Oishee Mazumder, Ananda Sankar Kundu, Subhasis Bahumik "Technology in Gait Analysis for Quantitative Evaluation of Able and Disabled Walking Performance", published in the book "Biomedical Engineering & Assistive Devices" published by Copal Publishing, New Delhi, ISBN: 978-93-83419-08-1
- 6. Soumya Manna, Prasanna Kumar Lenka, Subhasis Bhaumik "Hand Exercising Exoskeleton: An Aging Assistive Device for Rehabilitation", in the book "Optimizing Assistive Technologies for Aging Populations" by Yosry S. Morsi, Anupam Shukla and Prakash Rathore, IGI Global, ISBN 978-1-4666-9530-6, 2015.

Electrical Engineering

Publications

Journals

<u>2016</u>

- 1, S. Sen, S. Chanda, S. Sengupta, A. De, "Demand response governed swarm intelligent grid scheduling framework for social welfare", International Journal of Electrical Power and Energy Systems (Elsevier), (ISSN 0142-0615), Volume 78, June 2016, Pages 783–792, Impact Factor: **3.432**
- S. Sengupta, S. Debnath, Anindita Sengupta, "Fabric bending behaviour testing instrument for technical textiles", Journal of Measurement, ELSEVIER, vol. 87, pp.205-215, 2016.Impact Factor 1.48.
- Ujjwal Mondal, Anindita Sengupta and Rajeev R. Pathak, "Servomechanism for periodic reference input: Discrete wavelet transform-based repetitive controller:, Transactions of the Institute of Measurement and Control, SAGE, DOI: 10.1177/0142331214562657; 2016. Impact Factor 0.962, citation 2.

- 4. Chaity Sarkar and Aparajita Sengupta, "LMI based LSVF Control of a Class of Nonlinear Systems with Parametric Uncertainty: An Application to an Inverted Pendulum System". International Journal of Control, Impact Factor 1.654, (accepted for publication).
- 5. A Bhattacharjee, **A Sutradhar**, "Data driven nonparametric identification and model based control of glucose-insulin process in type 1 diabetics", Journal of Process Control, vol-41, 2016, pp.14-25.
- 6. S Mandal, A Sutradhar, "Multi-objective Control of Blood Glucose with H∞ and Poleplacement Constraint", International Journal of Dynamics and Control, DOI: 10.1007/s40435-015-0160-7, 2016.
- 7. Maity Deblina, Banerjee Sumit, **Chanda C.K.**,"A Comparative Study of Improved Teaching Learning Based Optimization Technique on Economic Load Dispatch Problem with Generator Constraints, IGI Global 2016(Accepted)
- Kaustav Dasgupta, Sumit Banerjee, C.K.Chanda" Short term Hydro-Wind-Thermal Scheduling based on Particle Swarm Optimization Technique" International Journal of Electrical Power and Energy Systems (IJPES) Elsevier (Accepted IJEPES-D-14-00905R1),2016.
- T.K. Chattopadhyay , S. Banerjee, C.K.Chanda "Voltage Stability Index of Radial Distribution Networks by considering Distributed Generator for different type of loads." International Journal of Energy Optimization and Engineering (IJEOE) Vol 5(1),pp. 1-22, 2016.
- Gyanendra Rout, Tamalika Chowdhury, C.K. Chanda, "Betweenness Tool of Vulnerability analysis of Power System" Journal of Institution of Engineers (India) : Series B, 2016 (Submission IEIB-D-14-00269 accepted).
- 11.Xiaomin Lu, K.L.V. Iyer, Kaushik Mukherjee and N. C. Kar, "Investigation of Integrated Charging and Discharging Incorporating Interior Permanent Magnet Machine with Damper Bars for Electric Vehicles", IEEE Transactions on Energy Conversion, vol. 31, no. 1, pp. 260-269, March 2016. (Impact factor 2.326, source: http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=60).
- 12.'Parna. Sarkar, Arijit Baral, **Kanika Das (Bhatyacharya), Prasid Syam**, "An Ant Colony Based Control of Shunt Capacitor Banks for Bulk Electricity Consumers", Applied Soft Computing, Elsevier, Vol. 43, pp 520-534, June 2016 Impact Factor: **2.810**.

<u>2015</u>

- D. Sarkar, D. Roy, A.B. Choudhury, S. Yamada, Performance analysis of saturated iron core superconducting fault current limiter using Jiles–Atherton hysteresis model, Journal of Magnetism and Magnetic Materials, Volume 390, 15 September 2015, Pages 100-106, ISSN 0304-8853, <u>http://dx.doi.org/10.1016/j.jmmm.2015.04.071</u>, impact factor: **1.979**, citation:1.
- 14. D. Sarkar, A. De, C. K. Chanda and S. Goswami, "Kruskal's Maximal Spanning Tree Algorithm for Optimizing Distribution Network Topology to Improve Voltage Stability",

Electric Power Components & Systems Journal, Taylor & Francis Publication (ISSN 1532-5008), Vol.43, Issue 17, Aug 2015, pp. 1921-1930, Impact Factor: **0.66.**

- 15. S. Chanda and A. De, "Optimal stabilization of social welfare under small variation of operating condition with bifurcation analysis", Journal of The Institute of Engineers, India (series B), Springer Publication, July 2015, pp.1-12.
- 16. Ujjwal Mondal, **Anindita Sengupta** & Ananya Roy, "Repetitive controller: an advanced Servomechanism for periodic reference input" International Journal of Dynamics and Control, **SPRINGER**, DOI 10.1007/s40435-014-0144-z, January 4, 2015.
- 17. Anindita Sengupta, Subhasish Roy, Surajit Sengupta," Development of a low cost yarn parameterization unit by Image Processing", Journal of Measurement, ELSEVIER, vol. 59, pp.96-109,2015.Impact Factor 1.48, citation 2.
- Arpita Bhattacharjee, Ashoke Sutradhar, "<u>Online Identification and Internal Model Control</u> for Regulating Hemodynamic Variables in Congestive Heart Failure Patient", International Journal of Pharma Medicine and Biological Sciences, Vol-4, No.2, 2015, pp.85.
- 19. Tandra Sarkar, Atheni Konar, Nirmal Chandra Sukul, Anirban Sukul, Indrani Chakraborty, Pallab Datta, **Ashoke Sutradhar**, "Free water molecules and hydrogen bonding form the basis of variation in homeopathic potencies as revealed by vibrational spectroscopy", International Journal of High Dilution Research, vol-14, issue-4, 2015, pp.8-15, Impact Factor:..., Citations:
- Partha Kayal, C.K. Chanda, "Optimal Mix of Solar and Wind Distributed Generations Considering Performance Improvement of Electrical Distribution Network", RENE Elsevier, vol. 75 (2015) pp. 173-186 0960-1481/2014
- P. Kayal and C.K.Chanda, "A Multi-Objective Approach to Integrate Solar and Wind Energy Sources with Electrical Distribution Network", Solar Energy, Elsevier, vol. 112, pp. 397-410, 2015.
- 22. Chunyan Lai, K.L.V. Iyer, Kaushik Mukherjee and N.C. Kar, "Analysis of Electromagnetic Torque and Effective Winding Inductance in a Surface-Mounted PMSM during Integrated Battery Charging Operation", IEEE Transactions on Magnetics, vol. 51, no. 11, pp. 1-4, November 2015. (Impact factor 1.386, source: http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=20).
- 23. Xiaomin Lu, K. L. V. Iyer, Kaushik Mukherjee, K. Ramkumar and N. C. Kar, "Investigation of Permanent Magnet Motor Drives Incorporating Damper Bars for Electrified Vehicles", IEEE Transactions on Industrial Electronics, vol. 62, no. 5, May 2015, pp. 3234-3244 (Impact Factor: 6.498, source: http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=41, cited by 7 in last 1 year)
- P. Konar, Dr. P. Chattopadhyay, "Multi-Class Fault Diagnosis of Induction Motor Using Hilbert and Wavelet Transform", Applied Soft Computing (ELSEVIER), Vol. 30, 2015, pp 341–352. Impact Factor 2.8 Citation 4.
- 25. P. Konar, **P. Chattopadhyay**, "Knowledge Extraction using Data Mining for Multi-Class Fault Diagnosis of Induction Motor", **Neurocomputing** (ELSEVIER), Vol. 166, 2015, pp. 14–25. Impact Factor: **2.29**, Citation **3**.
- 26. R. Kumar, S. Das, **P. Syam**, and A. K. Chattopadhyay "Review on model reference adaptive system for sensorless vector control of induction motor drives" EPA, IET, Vol.9, Issue-7, pp 496-511, 2015.Impact Factor:**1.21**.

<u>2014</u>

- 27. S. Chanda and A. De, "A Multi-Objective Solution Algorithm for Optimum Utilization of Smart Grid Infrastructure towards Social Welfare", International Journal of Electrical Power and Energy Systems (Elsevier), (ISSN 0142-0615), Volume 58, June 2014, pp. 307–318, Impact Factor: 3.432.
- 28. Barnali K Sarkar, Abhijit Chakrabarti, Abhinandan De, "Identification of Preferable Distributed Generators Locations for Congestion Relief in Multi-Bus Power Network", Journal of Energy and Power Engineering, Scientific Research Publishing, 2014.
- 29. Nanda S.K., Sengupta M. and Sengupta A., "Modelling, Simulation, Fabrication, Experiments and Real-Time Linear State Variable Feedback Control of Cuk Converter using Pole Placement Technique", accepted for JOURNAL OF THE INSTITUTION OF ENGINEERS (INDIA): SERIES B, Vol. 95, No. 2, May.2014.
- 30. A Bhattacharjee, **A Sutradhar**, "Data Driven Identification of IDDM Patient Model", International Journal of Advancements in Electronics and Electrical Engineering, Vol-3, issue-4, Vol-3, No.4, 2014, pp.
- A. Bhattacharjee, A. Sutradhar, "Online Frequency Domain Volterra Model of Glucose-Insulin Process in Type-1 Diabetics", Journal of Biomedical Engineering and Technology, Vol.2, No.2, 2014, pp.13-20.
- 32. Sumit Banerjee, **C. K. Chanda**, D.Das, "Reconfiguration of Distribution Systems based on Fuzzy Multiobjective Approach by considering Loads of Different Types", Journal of Institution of Engineers (I), Series B, Vol-94, Issue-1, 2014 (Awarded Tata Rao Prize).
- 33. **C.K.Chanda**, C.M.Khan, "Study of Thermal Generating Unit of Multi-Area Power System Connected to Grid and its stability", International Journal of Recent Development in Engineering and Technology, ISSN 2347-6435(online),vol.2, Issue2, February 2014, 10.pdf
- 34. T.K.Chattopadhyay, Sumit Banerjee, Chandan Kumar Chanda, "A simple approach on voltage stability index of distribution system for loads of different types", International Review of Electrical Engineering (IREE), vol.9, No. 5, pp. 1002-1011, September- October 2014. (ISSN: 1827-6660 e-ISSN: 1827-6679) (DOI: http://dx.doi.org/10.15866/ire.v9i5.915).
- 35. Sumit Banerjee, D.Das, **Chandan Kumar Chanda**, "Voltage Stability of Radial Distribution Networks for Different Types of Loads", **International Journal of Power and Energy Conversion, InderScience** vol.5,no.1,pp.70-87,2014.(DOI: 10.1504/IJPEC.2014.059984).
- 36. J.K. Moharana, **M. Sengupta** and **A. Sengupta**, "Design and Implementation of a PI-Controller on a 10kVA STATCOM prototype", International Journal of Power and Energy Conversion, Inderscience 2014.
- 37. Chaudhury S.B., **Sengupta M.** and **Mukherjee K**, "Vibration Monitoring of Rotating Machines Using MEMS Accelerometer", International Journal Of Scientific Engineering And Research (IJSER) Journal' ISSN : 2347-3878, 2014.
- 38. P. Konar, Dr. P. Chattopadhyay, "Feature Extraction Using Wavelet Transform For Multi-Class Fault Detection of Induction Motor", Journal of the Institution of Engineers (India): Series B, vol. 95. No. 1, 2014, pp 73-81.Citation 4.

<u>2013</u>

- 39. T. Santra, **D. Roy** and **A. B. Choudhury**, "Fuzzy Control of a Vertical Shaft Single Axis Controlled Repulsive-Type Magnetic Bearing", International Journal of Advanced Research in Engineering and Technology, Vol. 4, Issue 4, May-June 2013, pp. 200-207, impact factor: 1.568(open access)
- 40. T. Santra, **D. Roy** and **A. B. Choudhury**, "Single Axis Controlled Vertical Shaft Repulsive-Type Magnetic Bearing and Control", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol. 2, Issue 8, August 2013, pp. 3905-3911, impact factor: 5.016 (open access)
- 41. Subhasish Roy, Anindita Sengupta, Surajit Sengupta, "Determination of Diameter Spectrogram and Neps for yarn parameterization using Image Processing", International Journal of Electrical, Electronics and Computer Engineering, ISSN No.2277-262, pp. 72-76, 2013.
- 42. Rimi Paul, **Anindita Sengupta**, Rajeev Ranjan Pathak, "Wavelet based denoising technique for liquid level system", **Elsevier** Journal of Measurement, vol. 46, pp.1979-1994, 2013. Impact Factor **1.48**, citation **16**.
- 43. J. K. Moharana, **M. Sengupta, A. Sengupta**, "Design, Analysis and Implementation of a Small Signal Control Strategy on a 10 kVA STATCOM Prototype Connected to Inductive Load", J. Inst. Eng. India Ser. B, DOI 10.1007/s40031-013-0042-3, August, 2013.
- 44. **Chandan Kumar Chanda**, Sumit Banerjee, A. Mukherjee "Voltage Stability Margin of Radial Distribution Systems for Composite Loads using Distributed Generators," International Journal on Systems Applications and Algorithms, vol. 3, issue ICEEC 13, pp. 130-134, 2013.
- 45. **Chandan Kumar Chanda**, Partha Kayal "Placement of Wind and Solar Based DGs in Distribution System for Power Loss Minimization and Voltage Stability Improvement", Int. Journal of Electrical Power and Energy System, **Elsevier**. vol. 53, pp. 795-809, 2013.
- 46. S. B. Chaudhury, Mainak Sengupta and Kaushik Mukherjee, "Experimental study of induction motor misalignment and its online detection through data fusion", IET Journal Elect. Power Appl., vol.7, no.1, Jan. 2013, pp. 58-67. (Impact Factor: 1.211, source: <u>http://www.bioxbio.com/if/html/IET-ELECTR-POWER-APP.html</u>), cited by 2 in last 3 years.
- 47. Xiaomin_Lu, <u>K.L.V.</u> Iyer, Kaushik <u>Mukherjee</u>, N. C. <u>Kar</u>, "A Novel Two-Axis Theory-Based Experimental Approach Towards Determination of Magnetization Characteristics of Line-Start Permanent Magnet Synchronous Machines", *IEEE Transactions on Magnetics*, vol. 49, no. 8 Part I, 2013 (Digital Object Identifier: <u>10.1109/TMAG.2013.2259152</u>), pp. <u>4733-4737</u>.

(Impactfactor1.386,source:<u>http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=20</u>), cited by 1 in last 3 years.

- 48. Xiaomin_Lu, K.L.V. Iyer, Kaushik <u>Mukherjee</u>, N. C. Kar, "Development of a Novel <u>Magnetic Circuit Model for Design of Premium Efficiency Three-Phase Line Start Permanent Magnet Machines With Improved Starting Performance</u>," *IEEE Transactions on Magnetics*, vol. 49, no. 7, 2013 (Digital Object Identifier: <u>10.1109/TMAG.2013.2242869</u>), pp. 3965-3968. (Impact factor 1.386, source: <u>http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=20</u>), cited by 9 in last 3 years.
- 49. Kaushik Mukherjee, K. L. V. Iyer, Xiaomin Lu and N. C. Kar, "A Novel and Fundamental Approach Toward Field and Damper Circuit Parameter Determination of Synchronous Machine", IEEE Transactions on Industry Applications, vol. 49, No. 5, Sept-Oct. 2013,

pp.2097-2105.(Impactfactor1.756,source:http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=28), cited by 1 in last 3 years.

- 50. Moharana J.K., **Sengupta M.** and **Sengupta A**., "Design, Analysis and Implementation of a Small Signal Control Strategy on a 10 kVA STATCOM Prototype Connected to Inductive load ", accepted for publication in the JOURNAL OF THE INSTITUTION OF ENGINEERS (INDIA): SERIES B, Vol.94, Issue 1, March-May 2013, pp 61-70.
- 51. Roy M. and Sengupta M., "Electro-magnetic investigations and power converter efficiency studies on a laboratory made induction heating prototype", accepted for publication in the JOURNAL OF THE INSTITUTION OF ENGINEERS (INDIA): SERIES B, Vol. 94, No. 3, Dec.2013, pp. 153-160.
- 52. **S. Dalapati**, "A predictive algorithm for minimising dead time distortions in sine-wave VSI with L-C output filter," International Journal of Power Electronics, Vol. 5, Nos. 5/6, 2013, pp. 392 429. Impact Factor: N/A, Citations: NIL

Conferences

<u>2016</u>

- 1. A. Upadhyaya, D. Sarkar, A. B. Choudhury, D. Roy, "Performance Analysis of a Threephase SISFCL with the Variation of Circuit Parameters using Jiles Atherton Hysteresis Model", 2nd International Conference on Control, Instrumentation, Energy and Communication (CIEC), 28-30 January, 2016, pp. 220-224, Department of Applied Physics, University of Calcutta (Selected as Best paper in session Power System).
- 2. S. Chanda and A. De, "An Intelligent Energy Management System to Optimise Demand Response in Smart Micro Grids", Proceedings of the 2nd International Conference on Control, Instrumentation, energy and Communication, 2016 (CIEC16), IEEE conference, University College of Science and Technology, Kolkata, India
- 3. Arunima Mukherjee and Aparajita Sengupta, "Input Tracking of Lipschitz nonlinear systems using Input-State-Stability approach", Proceedings of the 2nd international conference on control, instrumentation, energy and communication, CIEC-16, Paper ID-57.
- 4. Sachidananda Sen, Shouvik Chakraborty, **Ashoke Sutradhar**, "T<u>wo-Stage Adaptive</u> <u>Sliding-mode Controller for Vehicle Yaw Stability Using Differential ABS</u>", Proc. IEEE First Int Conference on Control, Measurement and Instrumentation (CMI-2016).
- 5. Rimi Paul, **Anindita Sengupta**, Performance study of Multiresolution PI controller for Third Order System, Proc. IEEE First Int Conference on Control, Measurement and Instrumentation (CMI-2016), pp.215-218, 2016.
- 6. Dilshad Ahmad, **Chandan Kumar Chanda**, "A Frame work For Resilience Performance Analysis of An Electrical Grid", Second International Conference on Control,

Instrumentation, Energy and Communication (CIEC -2016), 28-30th January, Department of Applied Physics, Calcutta University, Kolkata, India.

- Mondal Abhishek, Maity Deblina, Banerjee Sumit, Chanda C. K., "Solving of Economic Load Dispatch Problem with Generator Constraints Using ITLBO Technique", IEEE Students' Conference on Electrical, Electronics and Computer Science (SCEECS) 2016, Bhopal, India.(Accepted)
- 8. Pal Ankit, Dasgupta Kaustav, Banerjee Sumit, **Chanda C. K.**," An Analysis of Economic Load dispatch with Ramp Rate Limit constraints using BSA", IEEE Students' Conference on Electrical, Electronics and Computer Science (SCEECS) 2016, Bhopal, India (Accepted)
- 9. K.C.Meher, R.K.Swain, C.K. Chanda, "Bat Inspired Algorithm for solving Hydrothermal Scheduling Problems" Ist IEEE International Conference for the research on emerging applications in Technology and Engineering (ICREATE-2016), Feb 25-27, 2016, Techno India College of Technology, Saltlake, Kolkata, WB.(Accepted)
- Maity Deblina, Banerjee Sumit, Chanda C.K., "Implementation of Different Optimization Techniques for Solving of Economic Load Dispatch Problem Considering Various Generator Constraints", International Conference on Devices, Circuits and Systems (ICDCS 2016), Tamil Nadu, India. (Accepted).
- 11. Kaustav Dasgupta, Sumit Banerjee, Chandan Kumasr Chanda, "Economic Load Dispatch with prohibited Zone and Ramp – Rate Limit constraints- a comparative study", International Conference on Control, Measurement and Instrumentation (CMI-2016), January 8-10 2016, Jadavpur University, Kolkata, India.
- 12. Atri Bera, T. Chowdhury, **C.K.Chanda**, "An Application of Complex Network in Allocation of Distributed generation in Distribution network" Second International Conference on Control, Instrumentation, Energy and Communication (CIEC -2016),28-30 th January, Department of Applied Physics, Calcutta University, Kolkata, India.
- 13. S.K.Samanta, **C.K.Chanda**, "Improved Cost Analysis Through Smart Grid Network Due to Dynamic Demand Load Respond". 6th IEEE International Conference on Power Systems, 2016 (ICPS -2016), IIT-Delhi, New Delhi, India (accepted).
- 14. Abhisek Maiti, Kaushik Mukherjee and Prasid Syam, "Design, Modeling and Software Implementation of a Current-Perturbed Maximum Power Point Tracking Control in a DC-DC Boost Converter for Grid-Connected Solar Photovoltaic Applications", paper ID 30, in CD ROM-based proceedings of the 2016 IEEE First International Conference on Control, Measurement and Instrumentation, held during Jan. 8-10, 2016, Kolkata, India (IEEE Conference ID: 36494, IEEE Xplore Compliant ISBN No.: 978-1-4799-1769-3, IEEE Xplore Compliant Part No.: CFP16C90-ART).
- 15. Abhinandan Basak, Kaushik Mukherjee and Prasid Syam, "Speed Control of A Grid Connected Doubly-Fed Induction Generator System for Maximum Power Point Tracking with Improved Input Power Factor Employing Matrix Converter as a Slip Power Exchanger", paper ID 31, in CD ROM-based proceedings of the 2016 IEEE First International Conference on Control, Measurement and Instrumentation, held during Jan. 8-10, 2016, Kolkata, India (IEEE Conference ID: 36494, IEEE Xplore Compliant ISBN No.: 978-1-4799-1769-3, IEEE Xplore Compliant Part No.: CFP16C90-ART).
- 16. Abhisek Maiti, Kaushik Mukherjee and Prasid Syam, "Design Methodology, Control and Performance of a Three-Phase Grid-Tie PV Inverter under Maximum Power Point Tracking", paper ID 73, in CD ROM-based proceedings of the Second International Conference on Control, Instrumentation, Energy & Communication (CIEC-2016) held

during Jan. 28-30, 2016, Kolkata, India (IEEE Conference ID: 36757, IEEE Xplore Compliant ISBN No.: 978-1-5090-0035-7/IEEE Xplore Compliant Part No.: CFP1697V-ART).

- 17. Tanmoy Dey, Kaushik Mukherjee and Prasid Syam, "Dynamic Adjustments of the D-Q axes Reference Voltage Limits during Flux Weakening and Maximum Torque Per Ampere Control of an IPMSM Drive for an EV Application", paper ID 74, in CD ROM-based proceedings of the Second International Conference on Control, Instrumentation, Energy & Communication (CIEC-2016) held during Jan. 28-30, 2016, Kolkata, India (IEEE Conference ID: 36757, IEEE Xplore Compliant ISBN No.: 978-1-5090-0035-7/IEEE Xplore Compliant Part No.: CFP1697V-ART).
- 18. Abhinandan Basak, Kaushik Mukherjee and Prasid Syam, "Effect of Matrix Converter on the Speed Control Scheme of a Grid Connected Doubly-Fed Induction Generator System", paper ID 59, in CD ROM-based proceedings of the Second International Conference on Control, Instrumentation, Energy & Communication (CIEC-2016) held during Jan. 28-30, 2016, Kolkata, India (IEEE Conference ID: 36757, IEEE Xplore Compliant ISBN No.: 978-1-5090-0035-7/IEEE Xplore Compliant Part No.: CFP1697V-ART).
- P. S. Panigrahy, S. Mitra, P. Konar, P. Chattopadhyay, "FPGA Friendly Fault Detection Technique for Inverter Fed Induction Motor" 2nd International Conference on Control, Instrumentation, Energy & Communication (CIEC-2016), January 28 - 30, 2016. (Best paper Award in Fault Diagnosis Section)
- 20. T. Dutta, **P. Chattopadhyay**, "Condition Monitoring of Electrical Equipment using Thermal Image Processing" IEEE First International Conference on Control, Measurement and Instrumentation (CMI-2016), January 8-10, 2016.
- 21. P. S. Panigrahy, P. Konar, **P. Chattopadhyay**, "Application of Data Mining in Fault Diagnosis of Induction Motor" IEEE First International Conference on Control, Measurement and Instrumentation (CMI-2016), January 8-10, 2016.

<u>2015</u>

- 22. Upadhyaya, A.; Sarkar, D.; **Choudhury, A.B.**; **Roy, D.**, "Performance Analysis of a 380V Three-Phase Saturated Iron-Core Superconducting Fault Current Limiter using Jiles-Atherton Hysteresis Model", in International Conference on Energy, Power and Environment: Towards Sustainable Growth (ICEPE), 12-13 June 2015.
- Sarkar, D.; Upadhyaya, A.; Choudhury, A.B.; Roy, D., "Synthesis of Parameter Dependency Performance of Saturated Iron-Core Superconducting Fault Current Limiter", in Michael Faraday IET International Summit: MFIIS-2015, September 12 – 13, 2015, Kolkata, India.
- 24. Sarkar, D.; Upadhyaya, A.; Choudhury, A.B.; Roy, D., "Investigation of the Performance of SISFCL with the Variation of Hysteretic Characteristics", in 12th IEEE India International Conference (INDICON 2015), 17-20 December 2015, Jamia Millia Islamia, New Delhi, India.
- Abhishek Dhar, Anindita Sengupta "Sliding Mode Control Algorithm with Adaptive Gain and Implementation on Inverted Pendulum System", Proceeding of IET International Summit: MFIIS-2015, pp. 8-13, Sept.12-13, 2015.
- 26. Shouvik Chakraborty, Sachidananda Sen, Ashoke Sutradhar, Anindita Sengupta, "Estimation of Tire-Road Friction Coefficient and Frictional Force for Active Vehicle Safety

System", **IEEE International** Conference on Industrial Instrumentation and Control(**ICIC**), Pune, pp. 674-679, 28-30 May,2015.

- Rimi Paul, Anindita Sengupta, "Selection of best wavelet for Discrete Wavelet Transform based PID controller connected with liquid level system and its performances analysis", IEEE International Conference on Industrial Instrumentation and Control(ICIC), Pune, pp. 55-59, 28-30 May, 2015.citation 1
- Ujjwal Mondal, Anindita Sengupta, Abhirup Basu, Sangeeta Bose, Upananda Saha "Finite Dimensional Robust repetitive Controller for Tracking Periodic Reference Input", IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT), pp. 1-4, 5-7 March, 2015.
- 29. Sarkar Chaity and **A. Sengupta**, "LMI Based Robust LSVF Stabilization of A Class of Nonlinear Systems", Proceedings of the 34th Chinese Control Conference, July 28-30, 2015, Hangjhou, China.
- 30. De Souradip and **A. Sengupta**, "Stabilization of Time Delay Systems with Lipschitz Nonlinearities using LSVF Control", Proceedings of Michael Faraday IET International Summit, September 12-13, 2015, Kolkata, India, Vol. 2, pp- 500-504.
- Arunima Mukherjee and Aparajita Sengupta, "Robust Stabilisation and Output Tracking of Lipschitz nonlinear systems, Proceedings of the 12th IEEE International Conference, INDICON-2015, (978-1-4673-6540-6/15/\$31.00 c 2015 IEEE), paper ID-1570170835.
- 32. Shouvik Chakraborty, Sachidananda Sen, Ashoke Sutradhar, "Estimation of Tire Slip-Angles for Vehicle Stability Control Using Kalman Filtering Approach", International Conference on Energy, Power and Environment:Towards Sustainable Growth (ICEPE), 2015.
- 33. Sachidananda Sen, Shouvik Chakraborty, Ashoke Sutradhar, "Estimation of Vehicle Yaw Rate and Lateral Motion for Dynamic Stability Control Using Unscented Kalman Filtering", Michael Faraday IET International Summit: MFIIS-2015.
- 34. **S.Parui** and **B. Basak**, Nonlinear Phenomena in Permanent Magnet Brushless DC Motor Drive, Michael Faraday IET International Summit-2015, 12-13 September, 2015, published in CD.
- 35. K.Dasgupta, S.Banerjee, and C.K. Chanda, "An Analysis of Economic Load Dispatch with Prohibited Zone constraint using different algorithms", Michael Faraday IET International Summit-2015 (MFIIS-2015), (IET Digital Library), September 12-13, 2015.
- 36. S.K.Saha, S.Banerjee, D.Maity, C.K.Chanda, "Optimal Sizing and Location Determination of Distributed Generation in Distribution Networks" in IEEE International Conference on Energy, Power, Environment (ICEPE 2015), NIT Meghalaya, 12-13th June 2015.
- 37. K.Dasgupta, S.Banerjee, and C.K.Chanda, "Short –Term Hydrothermal Scheduling Using Time Varying Acceleration Coefficient Based Particle Swarm Optimization with Constriction Factor and Inertia Weight Approach", IEEE International Conference on Energy, Power, Environment (ICEPE 2015), NIT Meghalaya, 12-13th June 2015.
- 38. K.Dasgupta, S.Banerjee, and **C.K.Chanda**, "An analysis of Economic Load Dispatch with Ramp-rate limit constraints using different algorithms", International Conference on

Industrial Instrumentation and Control (ICIC2015), College of Engineering Pune (COEP), Shivajinagar, Pune, Maharashtra, India 28-30th May, 2015.

- 39. S.K.Samanta, **C.K.Chanda** Wireless power network design through smart grid transmission system model", IEEE International Conference ICEPE 2015, 12-13'June, NIT, Meghalaya.
- 40. Tamalika Chowdhury, Abhijit Chakrabarti, Chandan Kumar Chanda, "Analysis of Vulnerability Indices of Power Grid Integrated DG units Based on Complex Network Theory", INDICON -2015, 17 – 20 th December, 2015, Jamia Milia Islamia University, New Delhi, India.
- 41. Amlan Chakraborty, **Chandan Kumar Chanda**, "Carbon Emission Savings by Reduction in Cycling Operation of Power Plants", International Conference on Advances in energy research (ICAER-2015), Dec. 15-17,2015, IIT Bombay, India.
- 42. **A. Chakraborty**, T. Santra, **D. Roy** and S. Yamada, "Modelling and Stability Analysis of a Repulsive type Magnetic Bearing", International Conference on Energy, Power and Environment (Towards Sustainable Growth), NIT Meghalaya, June 2015, p. 15. (citation: 0)
- 43. **D. Ganguly**, S. Sen, **P. Syam**, "Real time Prony Analysis for Fast Detection of Harmonics and Interharmonics in a Power Electronic Converter", Michael Faraday IET International Summit 2015 (MFIIS 2015), 12-13 September, 2015
- 44. S. Biswas, J.K Das, **K. Das (Bhattacharya)**, "Enhanced Role of Phasor Measurement Unit in Power System Adaptive Protection" ISGF, India Smart Grid Week,2-5th March, 2015 Bangalore.
- 45. T. Sarkar, **K. Das(Bhattacharya)**, H. Saha," Study of DC Microgrid Accompanying with Renewable Energy Sources for Rural Application" ISGF, India Smart Grid Week,2-5th March, 2015 Bangalore.
- 46. K. L. V. Iyer, S. Mukundan, H. Dhulipati, **K. Mukherjee**, H. Minaker and N. C. Kar, "Design Considerations for Permanent Magnet Machine Drives for Direct-Drive Electric Vehicles", Proceedings of IEEE International Electric Machines and Drives Conference, Idaho, USA, 2015.
- 47. Paitandi S. and **Sengupta M**., "Analysis, Design and Implementation of Sensorless V/f control in a Surface Mounted PMSM without damper winding" <u>Accepted for the</u> Proc. of the 7th National Power Electronics Conference (NPEC- 2015), Dec 21-23, 2015, IIT Bombay.
- 48. Roy M. and **Sengupta M.**, "An over-voltage protection scheme with very fast response for application in a CSI-fed induction heating prototype" <u>Accepted for the</u> Proc. of the 7th *National Power Electronics Conference (NPEC- 2015)*, Dec 21-23, 2015, IIT Bombay.
- 49. Nanda S.K. and Sengupta M.," Fabrication, Parameter Evaluation and Testing of a Permanent Magnet Synchronous Generator" <u>Accepted for the</u> Proc. of the 7th National Power Electronics Conference (NPEC- 2015), Dec 21-23, 2015, IIT Bombay
- 50. Mukherjee P. and **Sengupta M.**," Fabrication, Parameter Evaluation and Testing of a surface mounted -Brush-less DC Motor" <u>Accepted for the</u> Proc. of the 7th National Power Electronics Conference (NPEC- 2015), Dec 21-23, 2015, IIT Bombay.
- 51. Kundu J., and Sengupta M., " Design, Modelling, Fabrication of a Single-axis Attraction

type Levitation Prototype with 3-degree Freedom Control" <u>Accepted for the</u> Proc. of the 7th National Power Electronics Conference (NPEC- 2015), Dec 21-23, 2015, IIT Bombay.

- 52. Seal M., and **Sengupta M.**, "Design, analysis and fabrication of linear permanent magnet synchronous machine" <u>Accepted for the</u> Proc. of the 7th National Power Electronics Conference (NPEC- 2015), Dec 21-23, 2015, IIT Bombay.
- 53. P. Konar, P. S. Panigrahy, P. Chattopadhyay, "Tri-Axial Vibration Analysis using Data Mining for Multi class Fault Diagnosis in Induction Motor" Mining Intelligence and Knowledge Exploration (MIKE 2015), December 9-11, 2015, pp 553 - 562.
- 54. S. Mondal, **P. Chattapadhyay**, "Fuzzy Vs. Neuro-fuzzy: Implementation on the Reconfigurable FPGA System", International Conference on Energy, Power and Environment (ICEPE 2015), 12-13th June 2015
- 55. **S. Parui** and **B. Basak**, Nonlinear Phenomena in Permanent Magnet Brushless DC Motor Drive, Michael Faraday IET International Summit-2015, 12-13 September, 2015, published in CD.

<u>2014</u>

- 56. Sarkar, D.; Upadhyaya, A.; Choudhury, A.B.; Roy, D., "Performance analysis of a saturated iron core superconducting fault current limiter using different core materials," in Control, Instrumentation, Energy and Communication (CIEC), 2014 International Conference on , vol., no., pp.387-391, Jan. 31 2014-Feb. 2 2014. doi: 10.1109/CIEC.2014.6959116, citation:1.
- 57. D. Biswas, P. M. Adhikari and A. De, "An Artificial Neural Network based Power Swing Classification Technique", Proceedings of the 2014 Annual IEEE India Conference (INDICON 2014), included in IEEE XPLORE digital library
- 58. S. Chanda and A. De, "Social Welfare Maximization with a State Space based Model and Methodology", Proceedings of the 1st IEEE International Conference on Automation, Control and Energy Systems (ACES 2014), included in IEEE XPLORE digital library
- 59. S. Chanda and A. De, "Small Signal Stability Optimization Technique of Real Time OPF Model for Modern Power Networks" Proceedings of the 1st IEEE International Conference on Automation, Control and Energy Systems (ACES 2014), included in IEEE XPLORE digital library
- 60. Ujjwal Mondal Anindita Sengupta, "Robust Servo Performance of Repetitive Controller for Periodic Reference Signals", 6th IEEE Power India International Conference (PIICON), pp. 1-4, 05 Dec - 07 Dec 2014
- 61. Subhasish Roy, **Anindita Sengupta**, Surajit Sengupta "Yarn Hairiness Evaluation Using Image Processing" in the Proceeding of IEEE international conference on Control, Instrumentation, Energy and Communication(CIEC-14), 31 January-2 February,India,2014.
- 62. Ujjwal Mondal, **Anindita Sengupta**, Rajeev Ranjan Pathak, DWT based Repetitive controller for tracking of periodic reference signal, Proceeding of IEEE international conference on Control, Instrumentation, Energy and Communication(CIEC-14), 31 January-2 February,India,2014.

- 63. Anindita Sengupta, Arunima Mukherjee, Rimi Paul, Ananya Roy, Application of MRPID controller on Liquid level system: A performance study, Proceeding of IEEE international conference on Control, Instrumentation, Energy and Communication(CIEC-14), 31 January-2 February,India,2014.Citation 1
- 64. Seal S. and A. Sengupta, "Real Time Sliding Mode Liquid Level Control of a Coupled Tank System", Proceedings of the 14th International Conference on Control, Instrumentation, Energy and Communication (CIEC), Jan.-Feb. 2014, Kolkata, India, pp. 762-767.
- 65. D. Mondal and A. Sengupta, "Nonlinear Optimal TCSC Control in Comparison to PSO based Conventional Design in Small Signal Stability Enhancement," IEEE International Conference on Control, Instrumentation, Energy and Communication (CIEC-14), Calcutta, India, pp.319-323, Jan.31-Feb.2, 2014. No of citations = 1
- 66. Chaity Sarkar and **Aparajita Sengupta**, "Robust Control of A Uncertain Nonlinear System With Unobservable Dynamics" 3rd International Conference on Advances in Control and Optimization of Dynamical Systems, March 13-15th, 2014, IIT Kanpur.
- 67. Datta S., S. Seal and A. Sengupta, "Real Time Linear Quadratic versus Sliding Mode Liquid Level Control of a Coupled Tank System", Proceedings of the International Conference on Devices, Circuits & Communications (ICDCCom-2014), Ranchi, India, Sept. 12-13, 2014.
- Mukherjee, Mousumi; Sengupta, Aparajita, "Controller design for Lipschitz nonlinear system using linear matrix inequalities," *India Conference (INDICON), 2014 Annual IEEE*, pp.1-4, 11-13 Dec. 2014, doi: 10.1109/INDICON.2014.7030508 URL:<u>http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7030508&isnumber=7030354</u>.
- 69. A Bhattacharjee, **A Sutradhar**, "Data Driven Identification of IDDM Patient Model", Proc. of the Intl. Conf. on Advances in Computing, Electronics and Electrical Technology -CEET 2014,pp.94-98, Citations: ..
- 70. Barman B. and Sengupta M., "Design, fabrication, simulation and testing of an repulsion type levitation prototype", Accepted for presentation in the Proc. of the *International Power Electronics Drives and Energy Systems Conference (PEDES-2014)*, Dec 16-19, 2014, IIT, Bombay, INDIA.
- 71. S.Parui and B. Basak, Inherent Oscillation in Cuk Converter and its Effect 'on Bifurcation Phenomena, IEEE TENCON 2014, 22-25 October, 2014, Bangkok, Thailand, published in memory stick.
- 72. **S.Parui and B. Basak**, Effects of Input Voltage Ripple in the Bifurcation of Current Mode Controlled DC Drive, International Conference on Control, Instrumentation, Energy and Communication (CIEC 2014), January 31-February 2, 2014, University of Calcutta, published in CD-ROM.
- 73. **S.Parui and B. Basak**, Evolution of New Types of Borderline Trajectories in State Space in Current Mode Controlled DC-DC Converter due to Switching Delay, International Conference on Control, Instrumentation, Energy and Communication (CIEC 2014), January 31-February 2, 2014, University of Calcutta, published in CD-ROM.

- 74. P.Kayal, C.M. Khan, C.K. Chanda, "Selection of Distributed Generation for Distribution Network: A Study in Multi-Criteria Framework", IEEE International Conference on Control, Instrumentation, Energy and Communication, CU Kolkata, India, January 31-February 2, 2014.
- 75. P.Kayal, T. Ashish, C.K.Chanda, "Simultaneous Placement and Sizing of Renewable DGs and Capacitor Banks in Distribution Network", IEEE International Conference on Circuit, Power and Computing Technologies, NICHE Nagercoil, India, March 20-21, 2014.
- 76. P.Kayal, C. Kumar, C.K.Chanda , "Value based Planning of Renewable DGs in Distribution Network incorporating variable Power Load Model and Load growth", International Conference on Industrial Engineering Science and Applications, NIT Durgapur, India, April 2-4, 2014.
- 77. D. Sarkar, A. Upadhyaya, A. B. Choudhury and D. Roy, "Performance Analysis of a Saturated Iron Core Superconducting Fault Current Limiter using different core materials", International Conference on Control, Instrumentation, Energy & Communication, January 31-February 02, 2014, pp. 387-391. (citation: 2)
- 78. A. Datta, D. Ganguly, T. Patra, S. Akhuli, "Experimental results on low cost microcontroller based DC drive implementation", Second International Conference on Electrical Energy Systems (ICEES -2014), SSN College of Engineering, Kalavakkam, India, 7-9 January, 2014.
- 79. **K. Bhattacharya** et al, "A simple on-line method of characterizing PV Cells/Modules using Supercapacitor", Abstract No: 7TuPo.11.25LN,pp-1105-1106, The 6th World Conference on Photovoltaic Energy Conversion, (WCPEC-6), Nov 23-27, 2014.
- 80. K. Bhattacharya et al, "Application of Phasor Measurement Unit in Adaptive Protection for Loss of Excitation in a Generator", 6th IEEE POWER INDIA International Conference, PIICON 2014, 5th-7th Dec, 2014. Print ISBN: 978-1-4799-6041-5 INSPEC Accession Number:1520254.
- 81. K. Bhattacharya et al,"Design& Implementation of MPPT Algorithm for Battery Charging with Photovoltaic Panel Using FPGA", 6th IEEE POWER INDIA International Conference, PIICON 2014,5th-7th Dec, 2014, Print ISBN 978-1-4799-6041-5 INSPEC Accession Number: 15202603
- 82. Roy M. and Sengupta M., "Application of FPGA based PLL in a CSI fed induction heating prototype", Accepted for presentation in the Proc. of the *International Power Electronics Drives and Energy Systems Conference (PEDES-2014)*, Dec 16-19, 2014, IIT, Bombay, INDIA.
- 83. Nanda S.K. and **Sengupta M.**, "Design, Fabrication and Analytical Investigations on a Permanent Magnet Synchronous Generator for different renewable energy applications", Accepted for presentation in the Proc. of the *International Power Electronics Drives and Energy Systems Conference (PEDES-2014)*, Dec 16-19, 2014, IIT, Bombay, INDIA.
- 84. Paitandi S. and Sengupta M., "Design, Fabrication and Parameter Evaluation of a Surface

Mounted Permanent Magnet Synchronous Motor", Accepted for presentation in the Proc. of the *International Power Electronics Drives and Energy Systems Conference (PEDES-2014)*, Dec 16-19, 2014, IIT, Bombay, INDIA.

- 85. Mukherjee P. and Sengupta M., "Design, Fabrication and Parameter Calculation of a Brush-less DC Motor", Accepted for presentation in the Proc. of the *International Power Electronics Drives and Energy Systems Conference (PEDES-2014)*, Dec 16-19, 2014, IIT, Bombay, INDIA.
- 86. Kundu J., Sengupta M. and Sengupta A., "Design, modeling, fabrication and control of an attraction type levitation prototype", Accepted for presentation in the Proc. of the *International Power Electronics Drives and Energy Systems Conference (PEDES-2014)*, Dec 16-19, 2014, IIT, Bombay, INDIA.
- 87. Kar A., Sengupta M. and Barman B., "Design, Fabrication, Simulation and Testing of A Phase Modulated Resonant Transition Converter", Accepted for presentation in the Proc. of the *International Power Electronics Drives and Energy Systems Conference (PEDES-2014)*, Dec 16-19, 2014, IIT, Bombay, INDIA.
- 88. Banerjee R., Sengupta M. and Dalapati S., "Design and implementation of Current Mode Control in a Switched Reluctance Drive", Accepted for presentation in the Proc. of the International Power Electronics Drives and Energy Systems Conference (PEDES-2014), Dec 16-19, 2014, IIT, Bombay, INDIA.
- 89. P. S. Panigrahy, P. Konar, **P. Chattopadhyay**, "Broken Bar Fault Detection using Fused DWT-FFT in FPGA Platform", International Conference on Power, Control and Embedded Systems (ICPCES-2014), December 28-29, 2014.Citation **1**
- 90. A. Dasgupta, S. Dalapati and P. Syam, "Stepless Current Commutation in a Three Phase to Three Phase Matrix Converter," in *Conf. Rec. IEEE International Conference on Control, Instrumentation, Energy and Communication, 2014 (CIEC),* January 31 – February 02, 2014, Kolkata, India. Citations: NIL

<u>2013</u>

- 91. S. Jana and A. De, "Transmission line fault detection and classification using wavelet analysis", Proceedings of the IEEE INDICON 2013, pp.1-6, 2013, included in IEEE XPLORE digital library.
- 92. Subhasish Roy, Anindita Sengupta, Surajit Sengupta, "Determination of Diameter Spectrogram and Neps for yarn parameterization using Image Processing", in the Second Michael Faraday IET India Summit: MFIIS-2013, M 1-7.pp.1.23-1.28.,Kolkata, November 17, 2013.
- 93. Subhasish Roy, Anindita Sengupta, Surajit Sengupta, Raktim Maity, "Yarn Parameterization Based on Image Processing", Proceedings of IEEE international

conference on Signal Processing, Computing and Control(ISPCC), 26-28 September, India, 2013.

- 94. Arunima Mukherjee, Anindita Sengupta, "Selection of Optimum Wavelet Filter and Proper Level of Decomposition to design an MRPID Controller Connected to a Liquid Level System", Proceedings of National Conference on Recent Trends in Energy Systems(NCRTES-2013),5th-6th April 2013.
- 95. Arpita Mukherjee, Debaprasad Mukherjee, Aparajita Sengupta, "Filter design for tracking of ballistic target missile using seeker measurements with time lag," *IEEE International Conference on Signal Processing Image Processing & Pattern Recognition (ICSIPR-2013)*, pp. 351-355, 7-8 Feb. 2013
- 96. Chaity Sarkar and **Aparajita Sengupta**, "Control of a Class of Nonlinear Systems with Input Delay Using Mean Value Theorem Approach" Fifth International Conference on Computational Intelligence, Modelling and Simulation (CIMSim), 2013, pp. 185-189, Seoul, 24th-26th September,.
- 97. Janardan Kundu, **Mainak Sengupta, Aparajita Sengupta,** "Design, modelling, fabrication and testing of an electromagnetic coil system for a levitation", NPEC, I.I.T., Kanpur, Dec., 2013.
- 98. S. Nanda, **M, Sengupta and A. Sengupta**, "Design, modelling, fabrication and testing of an electromagnetic coil system for a levitation", NPEC, I.I.T., Kanpur, 20-22 Dec., 2013.
- 99. Chandan Kumar Chanda, Deblina Maity, Sumit Banerjee "Impact of Distributed Generators on Voltage Stability Margin of Distribution Networks", Second Intl. Conf. on Advances in Electronics, Electrical and Computer Engineering-EEC 2013, pp. 96-101, Dehradun, India, 22-23 June, 2013.
- 100. Chandan Kumar Chanda, K. Dasgupta, S. Banerjee"Voltage Stability Analysis of Radial Distribution Networks for Loads of Composite Type using Shunt Capacitor at Optimal Position", Second Intl. Conf. on Advances in Electronics, Electrical and Computer Engineering-EEC 2013, pp. 184-188, Dehradun, India, 22-23 June, 2013.
- 101. C.K.Chanda et al National Conference (ACER-13) Venue- Global Institute of Management,Krishnagar,nadia, hold on 22nd -23rd March 2013. "Study of Transient Stability Analysis by Transient Energy Function Method".
- 102. Atreyee Kundu, A. Sutradhar, "Robust Regional Pole Placement for an Inverted Pendulum System", Proceedings of 20th West Bengal State Science and Technology Congress, 2013, Vol.27, Tech-OP, pp. 349, Citations:
- 103. Chandan Kumar Chanda, Deblina Maity, Sumit Banerjee "Impact of Distributed Generators on Voltage Stability Margin of Distribution Networks", Second Intl. Conf. on Advances in Electronics, Electrical and Computer Engineering-EEC 2013, pp. 96-101, Dehradun, India, 22-23 June, 2013.

- 104. Chandan Kumar Chanda, K. Dasgupta, S. Banerjee"Voltage Stability Analysis of Radial Distribution Networks for Loads of Composite Type using Shunt Capacitor at Optimal Position", Second Intl. Conf. on Advances in Electronics, Electrical and Computer Engineering-EEC 2013, pp. 184-188, Dehradun, India, 22-23 June, 2013.
- 105. C.K.Chanda et al National Conference (ACER-13) Venue- Global Institute of Management,Krishnagar,nadia, hold on 22nd -23rd March 2013. "Study of Transient Stability Analysis by Transient Energy Function Method".
- 106. Chandan Kumar Chanda, Partha Kayal, Md. Abu Sena"Optimal Location, Type and Size selection Technique of Distributed Generation based on Economic Index", IEEE International Conference 'ICEEETS 2013', Kanyakumari, India, April 2013.
- 107. Chandan Kumar Chanda, Partha Kayal, Tanushree Bhattacharjee "Planning of renewable DGs for distribution network considering load model: A Multi Objective Approach", accepted in International Conference 'ICAER-2013', IIT Bombay, India, December 2013.
- 108. Chandan Kumar Chanda, Partha Kayal "Optimal Allocation of CHP based DGs in Distribution System Considering Load Model", accepted in International Conference 'ESMOC-2013', NIT Durgapur, India, December 2013.
- 109. **C.K.Chanda** et al ICERTSD-2013, Bengal Engineering and Science University, Shibpur, Aassessment of Distributed Generation in a Deregulated Power Market Scenario in India.
- 110. S. K. Samanta, C.K.Chanda " Low Cost Monitoring System by Smart Grid", IEEE National Conference, PESA 2013, pp 32-34, NIT, Rourkella.
- 111. Xiaomin_Lu, <u>K.L.V.</u> Iyer; K. <u>Mukherjee</u>, N. C. <u>Kar</u>, "<u>Study of permanent magnet</u> machine based flywheel energy storage system for peaking power series hybrid vehicle <u>control strategy</u>", IEEE <u>Transportation Electrification Conference and Expo (ITEC)</u>, 2013 (Digital Object Identifier: 10.1109/ITEC.2013.6573470), pp. 1-7.
- 112. K. L. V. Iyer, X. Lu, K. Mukherjee, and N. C. Kar, "Design of a Novel Copper-rotor Line Start Permanent Magnet Machine Tailoring Skin and Proximity Effects for Improved Starting Performance", Proc. of the 12th Joint MMM/Intermag-IEEE Conference, Chicago, USA, 2013.
- 113. Subimal Bikash Chaudhury, M. Sengupta and K. Mukherjee, "Air-gap flux analysis of misaligned induction motor under different load conditions", Paper ID 39 (Technical Session II: Motor Drives I), National Power Electronics Conference (NPEC), Indian Institute of Technology, Kanpur, 2013.
- 114. Paitandi S. and Sengupta M., "Design, Analysis of a Permanent Magnet Synchronous Motor and its Comparative study with 3-phase Induction Machine of Same Nominal Rating" Proc. of the 6th National Power Electronics Conference (NPEC- 2013), Dec 20-22, 2013, IIT Kanpur.
- 115. Roy M. and Sengupta M., "Analysis, Converter Design and Testing of High Frequency Induction Heating Coil for Special Application" Proc. of the 6th National Power Electronics Conference (NPEC- 2013), Dec 20-22, 2013, IIT Kanpur.
- 116. Nanda S.K., Sengupta M. & Sengupta A.," Modelling, Real time simulation, Fabrication of and Experiments on a Boost-Buck(Cuk) Converter "Proc. of the 6thNational Power Electronics Conference (NPEC- 2013), Dec 20-22, 2013, IIT Kanpur.

- 117. Chaudhuri S.B., Sengupta M. & Mukherjee K., "Finite Element Air Gap Flux Analysis of Misaligned Induction Motor Under Different Load Condition" Proc. of the 6th National Power Electronics Conference (NPEC- 2013), Dec 20-22, 2013, IIT Kanpur.
- 118. Mukherjee P. & Sengupta M.," Design, Analysis, Fabrication and Testing of a Current Controller for a Isolated Full Bridge DC-DC Converter" Proc. of the 6th National Power Electronics Conference (NPEC- 2013), Dec 20-22, 2013, IIT Kanpur.
- 119. Kundu J., Sengupta M. & Sengupta A.," Design, modelling, fabrication and testing of an electromagnetic coil system for a levitation "Proc. of the 6th National Power Electronics Conference (NPEC- 2013), Dec 20-22, 2013, IIT Kanpur.
- 120. P. Konar, Dr. P. Chattopadhyay, "Mechanical Fault Diagnosis of Induction Motor using Hilbert Pattern", IEEE First International Conference on Condition Assessment Techniques in Electrical Systems (CATCON-2013), pp. 202 – 206. Citation 1

Books

2014.

1. Debasish Mondal, Abhijit Chakrabarti and Aparajita Sengupta, Power System Small Signal Stability Analysis and Control, Publisher: Elsevier S & T Book division, ISBN No: 978-0-12-800572-9, May 2014. No of citations = **3**

2. S. K. Das, P. Syam," <u>Analysis of Different Current Commutation Technique in Matrix</u> <u>Converter</u>", Chapter-<u>Power Electronics and Renewable Energy Systems</u>, Vol. 326, Series <u>Lecture Notes in Electrical Engineering</u>, Springer Link, pp 485-496,2014

Patents

2014.

 Dr. Anindita Sengupta, Mr. Subhasish Roy, Dr. Surajit Sengupta, "A yarn Characterization Unit", Indian patent, App.No.897/KOL/2014, dated 29.08.2014(Filed on)
 Dr. Surajit Sengupta. Dr. Sanjay Debnath and Dr. Anindita Sengupta "A system for testing dynamically bending behavior of semi rigid fabrics and a method of such testing", Indian patents, App.No.1118/KOL/2014, dated 01.11.2014(Filed on).

2013.

3. M. Hurst, K.L.V. Iyer, N. C. Kar, M. Kazerooni, X. Lu, K. Mukherjee, "Method and apparatus for seamless power transfer", US patent publication no. US20130285453 A1, publication date October 31, 2013, application number US201313869141, filing date April 24, 2013, priority date April 26, 2012, also published as WO2013160753 (A1).