

International journals – July 2023 to June 2024

1. **Surajit Mukherjee, Avisankar Roy**, Smarajit Maity, Tapas Tewary, Koushik Dutta, Sunandan Bhunia, “Electromagnetic Band Gap Coupled Tri-Notched Miniaturized Ultra-Wideband Antenna Loaded with Slot and Parasitic Strip”, *International Journal of Communication Systems (Wiley)*, ISSN No. 1099-1131, DOI: <https://doi.org/10.1002/dac.5565>, July 2023. **(SCIE Indexed) (IF – 1.882)**
[<https://journalsearches.com/journal.php?title=INTERNATIONAL%20JOURNAL%20OF%20COMMUNICATION%20SYSTEMS>]
2. Sunandan Bhunia, Neha Gupta, Nitu Kumari, Jyotirmoy Bhargav, **Avisankar Roy**, Tapas Tewary, Smarajit Maity, “Study and Analysis on Compactness of Patch Antenna Utilizing Ground Plane with U slot”, *Journal of Nano- And Electronic Physics*, ISSN: 2077-6772, Vol. 15, No. 4, August 2023. **(Scopus Indexed) (IF – 0.425)**
[<https://journalsearches.com/journal.php?title=Journal+of+Nano+And+Electronic+Physics>]
3. H. Mondal, **K. Goswami**, Nistha Dutta, Mukunda madhav Das, Swarna Bhattarya, Mrinal Sen, "Design and simulation of phase shifter based on multimode interference in photonic crystal waveguides", *The European physical journal D (springer)*,(ISSN-1434-6079),Vol. 77,pp-188, DOI: 10.1140/epjd/s10053-023-00768-5, October-2023 (**SCI, SCIE, SCOPUS indexed**) **(IF-1.611)** .
[<https://journalsearches.com/journal.php?title=EUROPEAN%20PHYSICAL%20JOURNAL%20D>]
4. **Tirthadip Sinha**, Jaydeb Bhaumik, “Error-rate analysis of polar code designs using genetic algorithm for additive white Gaussian noise channel”, *International Journal of Communication Systems*, ISSN:1099-1131, Vol. 36, Issue 18 :e5611, August 2023; DOI:10.1002/dac.5611 **[SCIE indexed] (IF – 2.1)**
[<https://journalsearches.com/journal.php?title=International+Journal+of+Communication+systems>]
5. Angshuman Majumdar, **Tilak Mukherjee**, Sankar Gangopadhyay, “Estimation of Petermann I, Petermann II spot sizes for Kerr type nonlinear dispersion-shifted along with dispersion-flattened optical fibers in fundamental mode guidance applying a simple but accurate formalism”, *Journal of Nonlinear Optical Physics and Materials*, ISSN: 1793-6624, <https://doi.org/10.1142/S0218863523500704>, July 2023. **(SCIE, SCOPUS, UGC CARE indexed). (IF-2.7, SJR 0.248)**
[<https://journalsearches.com/journal.php?title=Journal+of+Nonlinear+Optical+Physics+and+Materials+>]
6. **Himadri Sekhar Das**, Santanu Mishra, Mrinal Kanti Dash, Prasanta Kumar Nandi, Subir Kumar Maity, Debnarayan Khatua, Anindita Chatterjee, Zhanhu Guo, Ben Bin Xu and Gourisankar Roymahapatra Transparent Conducting Gallium-Doped Zinc Oxide Thin Films on Glass Substrate for Optoelectronic Device Applications. *ES Mater. Manuf.*, **2023**, 22, 841.

7. Takashiro Akitsu, Swapan Sinha, Subhadeep Midya, **Himadri Sekhar Das**, and Gourisankar Roymahapatra .A Tutorial Mini-review on Crown Ethers Towards Rhodium Separation: Application of Crown Ether Studies. *ES Gen.*, **2023**, 1, 949.
8. Sweta Bijali Maity, **Raj Kumar Maity, Jagannath Samanta, Chanchal Kumar De**, "Comments on "New low power and fast SEC-DAEC and SEC-DAEC-TAEC codes for memories in space application"", *Integration, Elsevier*, Vol. 92, pp. 35-37, DOI: doi.org/10.1016/j.vlsi.2023.04.004, September, 2023. **(SCI Indexed)(IF – 1.315)**
9. Rajrup Saha, **Avishek Das**, Durbadal Mandal, Rajib Kar, "An optimal linear and elliptical antenna array design using black widow optimisation for 5G communication", *International Journal of Communication Systems*, Vol. 36, Issue.17, pp.1-20, 2023. (<https://doi.org/10.1002/dac.5597>).
10. Rajrup Saha, **Avishek Das**, Durbadal Mandal, Rajib Kar, "An Efficient Linear and Elliptical Antenna Array Design Using Sail Fish Optimization", *International Journal of Microwave and Wireless Technologies* (Accepted)
11. **M. Jana** and S. Kumar, "Performance analysis of irs-assist wireless communication system with Alamouti transmit diversity scheme." *Int. J. Electron. Commun.*, ISSN: 1434-8411 vol. 171, pp. 1–10, <https://doi.org/10.1016/j.aeue.2023.154878>, Sep,2023 **(SCI Indexed) (IF-3.20)**.
12. Heranmoy Maity, Mousam Chatterjee, Susmita Biswas, Aritra Bhowmik, Bineet Kaur, Ashish Kumar Singh, Parna Kundu, **Jagannath Samanta**, "A New Approach to Design of Cost-Efficient Reversible Quantum Dual-Full Adder and Subtractor", *International Journal of Mathematical, Engineering and Management Sciences*, Vol. 9, No. 2, ISSN: 2455-7749, 341-351, DOI: 10.33889/IJMEMS.2024.9.2.018, Jan 2024. **(Scopus, IF:1.4, Q3)**
13. **Tapan Maity**, Samaresh Paul, **Jagannath Samanta** and Prabir Saha, "Design And Development of IoT-Based Smarttech-Agri Devices for Smart Agriculture Crop Field", *Journal of The Institution of Engineers (India): Series B*, Springer, ISSN: 2250-2114, DOI : 10.1007/s40031-024-01002-5, January 2024. **(Scopus, IF:0.237, Q3)**.
14. **Suman Paul**, "A Comprehensive Review on Machine Learning-based Approaches for Next Generation Wireless Network, *Springer Nature Computer Science*, vol. 5, article no. 468 (2024), pp. 1-28, DOI: <https://doi.org/10.1007/s42979-024-02831-3>, April, 2024. **(Scopus)**.
15. **Amit Bhattacharyya**, Debashis De, and Manash Chanda, "Reliability Aspects in Repulsive Steric Hindrance Approach: Selectivity and Sensitivity Investigations," *Micro and Nanostructures*, vol. 191, pp. 207828, doi: 10.1016/j.micrna.2024.207828, April 2024. **(SCI, I.F. - 3.1)**

16. Suparba Tapna, **Kisalaya Chakrabarti** and Debarka Mukhopadhyay, “A review on quantum utility for secure authentication protocol towards cryptographic standard in quantum dot cellular automata”, *Journal of Discrete Mathematical Sciences and Cryptography*, 27:4, 1415–1423, DOI: 10.47974/JDMSC-1995, June 2024. **(Scopus)**
17. S. Selva Nidhyananthan, Shilpa Prashant Kodgire, **Tilak Mukherjee**, Papun Biswas, Jitendra Singh Tamang, B. Ganesh Pandi, M. Harienthiran, Bhaskar Roy, “Development of Opto-Electronic Free Space Optics Rain Attenuation Mathematical Model with Optisystem for Topological Optical Link Analysis”, *Communications on Applied Nonlinear Analysis CANA*, Vol. 30 (2), ISSN: 1074-133X. <https://doi.org/10.52783/cana.v30.i2.264>, 2023.
18. **Surajit Mukherjee, Avisankar Roy**, Arindum Mukherjee, Surajit Kundu, Partha Pratim Sarkar, Sunandan Bhunia, “Notch band characteristics improvement of a printed ultra-wideband antenna by embedding frequency Selective Surface”, *AEUE - International Journal of Electronics and Communications*, ISSN 1434-8411, Vol. 153, DOI: <https://doi.org/10.1016/j.aeue.2024.155276>, April 2024. **(SCIE Indexed) (IF – 3.86)**
19. **Surajit Mukherjee, Avisankar Roy**, Tapas Tewary, Kaushik Mandal, Partha Pratim Sarkar, Sunandan Bhunia, “Improvement in Notch Band Characteristics of a Hexagonal Super Wideband Antenna by Interfering Back Radiation Out of Phase with Front Radiation using FSS”, *International Journal of Communication Systems*, ISSN No. 1099-1131, DOI: 10.1002/dac.5814, April 2024. **(SCIE Indexed) (IF – 1.882)**
20. Takashiro Akitsu, Swapan Sinha, Subhadeep Midya, **Himadri Sekhar Das** and Gourisankar Roymahapatra, A Tutorial Mini-review on Crown Ethers Towards Rhodium Separation: Application of Crown Ether Studies, , ES General, 2023, 1, 949, DOI: 10.30919/esg949.
21. Abhishek Bag, Swapan Sinha, **Himadri Sekhar Das**, Santanab Giri, Gobinda Chandra De, Sibaprasad Maity, Ben Bin Xu, Zhanhu Guo, Jhuma Ganguly, and Gourisankar Roymahapatra, Hydrogen Storage Efficiency of the Ag (I)/Au (I) Decorated Five-Member Aromatic Heterocyclic (AH) Compounds: A Theoretical Investigation, , Engineered Science, 2024, 28, 1062, DOI: 10.30919/es1062.
22. **Himadri Sekhar Das**, Dipak Kumar Das, Subir Kumar Maity, Debnarayan Khatua, Gopal Kumar Gupta, Ramzi T. T. Jalgham, Takashiro Akitsu, Ajeet Kaushik, Shampa Bhattacharyya, and Gourisankar Roymahapatra, Analysis of the Influence of the Thickness of Transparent Conducting Oxide (GZO) with Ga-Doping and Its Use as Anode Materials in Organic Light-Emitting Diodes, , ES Energy & Environment, 2024, 25, 1239, DOI: 10.30919/esee1239.

23. N. Suzuki, H. Tsukada, R. Takahashi, **B. Bag** and M. Kim, "Characterization of Spatial Consistency of Cluster Channels in Urban Environments at 24 and 60 GHz", *IEEE Antennas and Wireless Propagation Letters*, vol. 23, no. 5, pp. 1583-1587, May 2024, DOI: 10.1109/LAWP.2024.3363191.
24. Hemant Patidar, **Avishek Das**, Rajib Kar, "Small Planar antenna array design using length and spacing through Matlab-HFSS interfacing", *International Journal of Communication Systems*, Vol. 37, Issue.9, pp.1-20, 2024. (<https://doi.org/10.1002/dac.5770>). (Wiley)

International Conference – July 2023 to June 2024

1. **Sachindeb Jana, Kisalaya Chakrabarti**, and Angsuman Sarkar, "Optimization of Different Parameters of One Bit Full Adder Using QCA Technology", *Proceedings of the 4th International Conference on Communication, Devices and Computing, Lecture Notes in Electrical Engineering 1046*, Organized by Haldia Institute of Technology, March 1-3,2023, Published in Springer LNE, Vol. 1046, ISBN: 978-981-99-2710-4, DOI: https://doi.org/10.1007/978-981-99-2710-4_27, Year.2023
2. **Suman Paul**, "Machine Learning Based Techniques for the Network Design of Advanced 5G Network, Beyond 5G (B5G) and Towards 6G: Challenges and Trends ", Proc. Of 3rd International Conference on Communication, Networks and Computing, Organized by Dept. of ECE, School of Engineering, December 8-10, 3 Days, 2022, Published in Communications in Computer and Information Science (CCIS) Springer, Vol. 1894, ISBN: 978-3-031-43144-9, DOI :https://doi.org/10.1007/978-3-031-43145-6_11, September, 2023.
3. **Suman Paul**, "Investigating Federated Learning Implementation Challenges in 6G", in IEEE Xplore, Proc. of Fourth International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT), organized by SSIET Bhilai, India, pp. 1-6, DOI: 10.1109/ICAECT60202.2024.10469650, March, 2024. (Scopus)
4. **Kushal Roy, Avisankar Roy, Surajit Mukherjee, Dibyendu Choudhury, Tirthadip Sinha**, and Subhashree Choudhury, "Study and Accurate Estimation of the Far Field Profile in Kerr Type Nonlinear Parabolic Index Optical Fiber for the First Higher Order (LP11) Mode Using Power Series Expansion Method Based on Chebyshev Technique", *2023 International Conference in Advances in Power, Signal, and Information Technology (APSIT)*, Organized by Siksha 'O' Anusandhan Deemed to be University, Bhubaneswar, India, 9th-11th June 2023, Published in **IEEE XPLORE**, ISBN: 979-8-3503-3936-9/23, August 2023, pp. 745-750, DOI: 10.1109/APSIT58554.2023.10201775 [**SCOPUS indexed**]
5. **Tapan Maity**, Adi Nath Bhawani, **Jagannath Samanta** and Prabir Saha, "Design of Smart Protective Devices For Precision Agriculture Using Internet-Of-Things", 6th Int. Conf. on 'Energy Systems, Drives and Automations', ESDA2023, Dec-2023 (accepted)

6. Rajrup Saha, **Avishek Das**, Durbadal Mandal, Rajib Kar, "An Efficient Concentric Circular Antenna Array Synthesis Using a Meta-Heuristic Optimisation," International Conference on Microwave, Optical, and Communication Engineering (ICMOCE), IEEE Xplore, pp. 1-5, Bhubaneswar, India, May 26-28, 2023.
7. Rajrup Saha, **Avishek Das**, Durbadal Mandal, Rajib Kar, "An Optimal Circular and Concentric Circular Antenna Array Design Using a Meta-Heuristic Optimisation," International Conference on Recent Advances in Electrical, Electronics, Ubiquitous Communication, and Computational Intelligence (RAEEUCCI), IEEE Xplore, pp. 1-6, Chennai, India, April 19-21, 2023.
8. Madhusudan Maiti, Pritam Bhattacharjee, Suddhendu Das Mahapatra and **Dibyendu Chowdhury**, "Overview on PUF Based Privacy and Security Aspects in IoT", *3rd International Conference on Recent Advances in Material Science and Computational Techniques (RAMSACT)*, School of Basic Sciences, Manipal University Jaipur, Jaipur, India, 20-21 September, 2023, (**Presented**).
9. **Dibyendu Chowdhury**, Suddhendu Das Mahapatra, Bishnu Prasad De, Rajib Kar, Durbadal Mandal and Madhusudan Maiti, "Optimal Design of Nano Scale Voltage Amplifier Using Evolutionary Techniques for DG-MOSFET", *3rd International Conference on Intelligent Computing Techniques for Smart Energy Systems (ICTSES-2023)*, Manipal University Jaipur, Jaipur, India, 14-15 December, 2023, (**Accepted**).
10. **M. Jana, A. Das** and S. Kumar, "Channel Capacity for IRS assist Wireless Communication System for 5G and Beyond", *ASPCON-2023*, Organized by Haldia Institute of Technology, 24-25 Nov, 2023, (Accepted) Published in IEEE xplore, 2023.
11. **Surajit Mukherjee, Avisankar Roy**, Sunandan Bhunia, "Design of Tri notched Ultrawideband antenna using U Slots and EBG structure", *Proc. Of International Conference on Ambient Intelligence, Knowledge Informatics and Industrial Electronics (AIKIIIE 2023)*, Organized by Rao Bahadur Y. Mahabaleswarappa Engineering College, Ballari, India, 2-3 November 2023, Published in IEEE Xplore.
12. **Amit Bhattacharyya**, Proma Nag, **Santanu Maity, Pinaki Satpathy**, Papiya Debnath and Manash Chanda, "Ventricular Dysfunction and Organ Transplant Rejection Determinant Biomarker Recognition in Serum via Charge Deduction Method" 15th International IEEE Conference on Computing, Communication and Networking Technologies (15th ICCCNT) 2024, June 24 th -28 th , 2024, organized by IIT-Mandi, in association with IEEE Electronics Packaging Society, Himachal Pradesh, India.
13. **Himadri Sekhar Das**, Abhilasha kumari, Anindita Das, Sneha Maiti, Surajit Mukherjee, Santanu Mishra, Gourisankar Roy Mahapatra, Prasanta Kumar Nandi, Study of Gallium-Doped Zinc Oxide Thin Films Processed by RF Magnetron Sputtering for Transparent Antenna Applications, International Conference

on Natural Sciences and Engineering for Sustainable Development (NSESD2024), ISBN: 978-81-971087-6-1.

Book Chapters – July 2023 to June 2024

1. **Jana, S., Chakrabarti, K.,** Sarkar, A. (2023). Optimization of Different Parameters of One Bit Full Adder Using QCA Technology. In: Sarkar, D.K., Sadhu, P.K., Bhunia, S., Samanta, J., Paul, S. (eds) Proceedings of the 4th International Conference on Communication, Devices and Computing. ICCDC 2023. Lecture Notes in Electrical Engineering, vol 1046. Springer, Singapore. https://doi.org/10.1007/978-981-99-2710-4_27.
2. **K. Chakrabarti,** ‘Translational Symmetry of Intermediate Nodes and Antinodes of Entangled Particles’, Quantum Entanglement in High Energy Physics [Working Title]. IntechOpen, Jul. 25, 2023. doi: 10.5772/intechopen.1002292.
3. **Suman Paul,** ‘Machine Learning Based Techniques for the Network Design of Advanced 5G Network, Beyond 5G (B5G) and Towards 6G: Challenges and Trends’, **Communications in Computer and Information Science (CCIS)**, Springer, Vol. 1894, pp-123-136, ISBN: 978-3-031-43144-9, DOI: https://doi.org/10.1007/978-3-031-43145-6_11, September, 2023. [Scopus]
4. **Tirthadip Sinha** and Jaydeb Bhaumik, ‘Efficient and Novel Architecture of Golay encoder and decoder for McEliece cryptosystem’, *Proceedings of the 4th International Conference on Communication, Devices and Computing*, Lecture Notes in Electrical Engineering (LNEE), Springer, Singapore, Vol. 1046, pp. 547-561, July 2023. ISBN: 978-981-99-2710-4, DOI: [10.1007/978-981-99-2710-4_44](https://doi.org/10.1007/978-981-99-2710-4_44) [SCOPUS indexed]
5. **Tapan Maity,** Pranabendu Giri, Rohit Sasmal, Niladri Biswas, Sourav Das, **Raj Kumar Maity,** Prabir Saha, **Jagannath Samanta,** ‘Design of Smart IoT-Based Gas Leakage Detection and Prevention Devices for Hydrogen Station’, Proceedings of the 4th International Conference on Communication, Devices and Computing. Lecture Notes in Electrical Engineering, vol 1046, Springer, Singapore, pp. 531-545, [10.1007/978-981-99-2710-4_43](https://doi.org/10.1007/978-981-99-2710-4_43), July, 2023.
6. Sweta Bijali Maity, **Raj Kumar Maity, Jagannath Samanta, Chanchal Kumar De,** ‘An Efficient SEC-DCEC Code for Protecting Data Bits in IoT Devices’, Proceedings of the 4th International Conference on Communication, Devices and Computing. Lecture Notes in Electrical Engineering, vol 1045, Springer, Singapore, pp. 391-400, DOI: [10.1007/978-981-99-2710-4_32](https://doi.org/10.1007/978-981-99-2710-4_32), July, 2023.
7. **Tapan Maity,** A. Roy, O. Das, R. Kashyap, A. Mishra, **Jagannath Samanta,** ‘Design and Development of IoT-Based Smart Health Monitoring System for Greenhouse Cultivation’,

Proceedings of ICTDsC 2023, Siliguri, Studies in Autonomic, Data-driven and Industrial Computing (SADIC), November 2023, 978-981-99-5434-6, 2023.

8. **Kushal Roy, Tilak Mukherjee**, Angshuman Majumdar, “Prediction of Far Field Profile in Optical Kerr Type Nonlinear Triangular Index Profile Fiber of LP₁₁ Mode using Simple and Accurate Chebyshev Technique”, Lecture Notes in Electrical Engineering LNEE Book series, Proceedings of 4th ICCDC 2023, Publisher: Springer Nature Singapore Pte. Ltd, vol. 1046, pp.367-377, ISBN: 978-981-99-2710-4, https://doi.org/10.1007/978-981-99-2710-4_30, July 2023. **(SCOPUS)**
9. Satyanarayana Talam, Ayesha Begum, M.B Chakravarthi, **Tilak Mukherjee**, Poornaiah Billa, Rambabu Busi, “Impact of Stress Concentrated Region on MEMS Based Piezoelectric Energy Harvester”, Lecture Notes in Electrical Engineering LNEE Book series, Proceedings of 4th ICCDC, 2023, Publisher: Springer Nature Singapore Pte. Ltd, vol. 1046, pp.657-664, ISBN: 978-981-99-2710-4, https://doi.org/10.1007/978-981-99-2710-4_52, July 2023. **(SCOPUS)**
10. **Dipak Samanta, Jayanta Kumar Bag, Chanchal Kumar De** and Abhijit Chandra, “Performance Analysis of Energy Harvesting-Based Relay-Assisted CR Network Under Co-channel Interference Environment”, **Lecture Notes in Electrical Engineering**, Springer, Singapore, Vol. 1046, pp- 685-705, ISBN: 978-981-99-2710-4, DOI: https://doi.org/10.1007/978-981-99-2710-4_55, July 2023. **[SCOPUS Indexed]**
11. Anitesh Anand, Niranjan Polai, Madhu Paswan, Manas Mishra, **Chanchal Kumar De**, Debasis De,” Nanorod Shaped TiO₂ Photoanode and Mixed Halide Absorber-Based Perovskite Solar Cell Device Fabrication”, **Lecture Notes in Electrical Engineering**, Publisher Springer Nature, September, 2023, Vol. 1046, pp-117-128, ISBN: 978-981-99-2709-8.
12. **Dipak Samanta, Chanchal Kumar De**, Abhijit Chandra, “Performance Analysis of Energy Harvesting-Based CR Network Assisted by Full-Duplex Relays Under Joint Underlay/Overlay Mode”, **Lecture Notes in Electrical Engineering**, Publisher Springer Nature, September, 2023, Vol. 1046, pp- 617-631, ISBN: 978-981-99-2709-8.
13. Souvik Manna, Debashis De, **Chanchal Kumar De**,” Performance of Multi Hop, Multi Link CRN with Energy Harvesting in Presence of CCI” **Notes in Electrical Engineering**, Publisher Springer Nature, September, 2023, Vol. 1046, pp- 617-631, ISBN: 1876-1119.
14. Rajrup Saha, **Avishek Das**, Durbadal Mandal, Rajib Kar, "An Optimal Circular Antenna Array Design for an Efficient 5G Communication System Using Krill Herd Optimization," International Conference on Communication, Devices and Computing (ICCDC-2023), LNEE, pp. 647-655, Vol. 1046, Haldia, India, March 1-3, 2023.
15. S. Paul, M. Maiti, **D. Chowdhury** and S. Chandra Saha, “Design of a Cost-Effective Remote Health Monitoring System Using IoT”. Lecture Notes in Electrical Engineering, Springer, vol

1046, pp. 125-137, ISBN: 978-981-99-2710-4, https://doi.org/10.1007/978-981-99-2710-4_11.
[SCOPUS Indexed]

16. M. Pandey, A. Chauhan, **D. Chowdhury** and S. Das Mahapatra, “Experimental Investigation on Spectrum Sensing Testbed Using GNU Radio and SDR”. Lecture Notes in Electrical Engineering, Springer, vol 1046 pp. 303-308, ISBN: 978-981-99-2710-4, https://doi.org/10.1007/978-981-99-2710-4_24. [SCOPUS Indexed]
17. **Avisankar Roy, Surajit Mukherjee**, Tapas Tewary, Smarajit Maity, Sunandan Bhunia, “Design of a compact dual-band antenna with meandered slotted patch and U-slotted defected ground plane”, **Lecture Notes in Electrical Engineering, Springer**, ISBN: 978-981-99-2709-8, DOI : 10.1007/978-981-99-2710-4_54, Vol. 1046, Chapter 54, pp. 677-684, July 2023. [Scopus Indexed]
18. **Himadri Sekhar Das**, Trends and Difficulties in Research and Applications of Renewable Energy, , Title: Machine Learning and Computer Vision for Renewable Energy,2024,Pages: 28,DOI: 10.4018/979-8-3693-2355-7.ch001.
19. **Himadri Sekhar Das**, Current and Future Research Directions, Title: Applied AI and Humanoid Robotics for the Ultra-Smart Cyberspace, 2024,Pages: 32,DOI: 10.4018/979-8-3693-2399-1.ch008.

Books – July 2023 to June 2024

1. Dilip Kumar Sarkar, Pradip Kumar Sadhu, Sunandan Bhunia, **Jagannath Samanta and Suman Paul (Eds)**, “Proc. of the 4th Int. Conference on Communication, Devices and Computing (ICCDC 2023) in Lecture Notes in Engineering (LNEE) Series”, vol. 1046, *Springer, Singapore*, ISBN: 978-981-99-2709-8, July 2023.
2. **Himadri Sekhar Das**, Santanu Mishra, Gourisankar Roy Mahapatra, Takashiro Akitsu, “Advances in Microwave Engineering” 1st Edition, First Published-**2023**, Imprint CRC Press, Pages19, eBook ISBN9781003459880, 2023.
3. **Himadri Sekhar Das**, Sudipta Banerjee, Heranmoy Maity, Optical Computing and its Applications, , LAP Lambert Academic Publishing, ISBN-10 : 6207647807.

Patent – July 2023 to June 2024

1. Applicant Name: **Dr. Avisankar Roy**
Application No.: 202421001431,
Date of filing of Application: 08/01/2024

Title of the invention: AN ADVANCEDMULTI-GENERATION VAPOUR COMPRESSION ABSORPTION REFRIGERATION SYSTEM (V-CARS)

Publication Date: 26/02/2024

Published in The Patent Office Journal No. 07/2024, Dated 16/02/2024; Page No. 15921

2. Indian Patent (Design) with Grant: IOT BASED OZONE MONITORING SYSTEM
Applicant and Inventor: **Tirthadip Sinha**
Design Number: 393776-001
Grant Date: 30/10/2023
Journal Date: 03/11/2023
Journal Number: The Patent Office Journal No. 44/2023
Application Date: 28/08/2023
3. UK Patent (Design) with Grant: ROBOT FOR INVENTORY MANAGEMENT
Applicant and Inventor: **Tirthadip Sinha**
Design number: 6336373
Grant date: 13 January 2024
Publication Date: 14 January 2024
Registration date: 29 December 2023
4. Indian Patent Publication: IOT BASED EFFICIENT AND SECURE MEDICAL DATA TRANSMISSION IN HEALTH CARE APPLICATIONS
Applicant and Inventor: Tirthadip Sinha
Application Number: 202311086444 A
Date of filing of Application: 18/12/2023
Publication Date: 19/01/2024
Journal Number: The Patent Office Journal No. 03/2024
5. Indian Patent (Design) with Grant: Smart waste management for Green environment
Applicant and Inventor: Tirthadip Sinha
Design Number: 402934-001
Grant Date: 02/02/2024
Journal Date: 02/02/2024
Journal Number: The Patent Office Journal No. 05/2024
Application Date: 23/12/2023
6. Applicant Name: Dr. Tilak Mukherjee
Application No.: 202421001431.
Date of filing of Application: 08/01/2024
Title of the invention: AN ADVANCED MULTI-GENERATION VAPOUR COMPRESSION ABSORPTION REFRIGERATION SYSTEM (V-CARS)
Publication Date: 16/02/2024
Published in The Patent Office Journal No. 07/2024, Dated 16/02/2024; Page No. 15921

7. Applicant Name: Dr. Tilak Mukherjee
Application No.: 202441011964
Date of filing of Application: 21/02/2024
Title of the invention: INNOVATIVE VISIBILITY ENHANCEMENT FOR POOR QUALITY IMAGES IN INCLEMENT DUSTY WEATHER
Publication Date: 08/03/2024
Published in The Patent Office Journal No. 10/2024, Dated 08/03/2024; Page No. 24241
8. Applicant Name: **Surajit Mukherjee**
Application No.: 202341087426,
Date of filing of Application: 20/12/2023
Title of the invention: MACHINE-LEARNING-BASED NATURAL LANGUAGE PROCESSING TECHNIQUES FOR LOW-LATENCY DOCUMENT SUMMARIZATION
Publication Date: 12/01/2024
Published in: The Patent Office Journal No. 02/2024, Dated 12/01/2024; Page No. 3476
1. Applicant Name: **Himadri Sekhar Das,**
Application No.: 202441036280
Date of filing of Application: 15/05/2024
Title of the invention: Enhancing Traffic Sign Detection and Recognition with Improved YOLOv5.
2. Applicant Name: **Himadri Sekhar Das,**
Application No.: 2024/01250,
Date of filing of Application: 09/02/2024
Title of the invention: An efficient system and method for removal of arsenic from water
3. Applicant Name: **Dibyendu Chowdhury**
Application No.: 202311071654,
Date of filing of Application: 20/10/2023
Title of the invention: An Optimized Gate Metal Variant Structures for Enhancement of Graded-Channel-Gate-Stack-Double-Gate MOSFET's switching/Analog performance
Publication Date: 24/11/2023
Published in: The Patent Office Journal No. 47/2023, Dated 24/11/2023; Page No. 78233
4. Applicant Name: **Dibyendu Chowdhury**
Application No.: 202311089691,
Date of filing of Application: 29/12/2023
Title of the invention: Opposition Based Bat Algorithm for Optimal Design of Fourth-Order Butterworth Low-Pass Active Filter
Publication Date: 23/02/2024
Published in: The Patent Office Journal No. 08/2024, Dated 23/02/2024; Page No. 18802
5. Applicant Name: **Dr. Banibrata Bag,**
Application No.: 202441036280,
Date of filing of Application: 07/05/2024
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