

International journals – July 2022 to June 2023

1. **Dibyendu Chowdhury**, B.P. De, S.K. Maity, N.K. Singh, R. Kar, D. Mandal “Performance Assessment of Graded Channel Gate-Stack based Double Gate MOSFET for Bio-sensing Applications”. *Silicon*, ISSN: 1876-9918, DOI: <https://doi.org/10.1007/s12633-022-02136-1>, Sept 2022. **(SCIE Indexed) (IF – 2.941)**
2. **Amit Bhattacharyya**, Debashis De, and Manash Chanda, “Temperature Imposed Sensitivity Issues of Hetero-TFET Based pH sensor,” *IEEE Trans. NanoBioscience*, ISSN: 1536-1241, DOI: 10.1109/TNB.2022.3202242, Aug. 2022. **(SCI Indexed) (IF - 3.206) (In Press)**
3. **Dipak Samanta, Chanchal Kumar De** and Avijit Chandra, "Performance Analysis of Full-Duplex Multi-Relaying Energy Harvesting Scheme in Presence of Multi-User Cognitive Radio Network”, *IEEE Transactions on Green Communications and Networking*, ISSN: 2473-2400, DOI: <https://doi.org/10.1109/tgcn.2022.3209752>, Sept 2022. **(SCIE Indexed)(IF – 3.88)**
4. Md. Arefin Islam, Alok Kumar Paul, Belal Hossain, Ajay Krishno Sarkar, Md. Mahabubur Rahman, Abu Sadat Md. Sayem, Roy B. V. B. Simorangkir, Md Asaduzzaman Shobug, John L. Buckley, **Kisalaya Chakrabarti** and Ali Lalbakhsh, "Design and Analysis of GO Coated High Sensitive Tunable SPR Sensor for OATR Spectroscopic Biosensing Applications", *IEEE Access*, vol. 10, pp. 103496-103508, doi: 10.1109/ACCESS.2022.3211099, Sept 2022. **(SCIE, Scopus Indexed) (IF – 3.367)**
5. Tapas Tewary, Smarajit Maity, **Surajit Mukherjee, Avisankar Roy**, Partha Pratim Sarkar, Sunandan Bhunia, “FSS Embedded High Gain ‘N’ shaped Miniaturized Broadband Antenna”, *AEUE - International Journal of Electronics and Communications*, ISSN 1434-8411, **(Accepted) November 2022. (SCIE Indexed) (IF – 3.183)**
6. **Raj Kumar Maity, Jagannath Samanta**, and Jaydeb Bhaumik, "Construction Techniques and Evaluation of High Performance t-bit Burst Error Correcting Codes for Protecting MCUs”, *Journal of Circuits, Systems, and Computers*. **(SCI Indexed) (IF - 1.278), accepted (24-10-2022).**
7. Tapas Tewary, Smarajit Maity, Surajit Mukherjee, **Avisankar Roy**, Partha Pratim Sarkar, Sunandan Bhunia, “FSS Embedded High Gain ‘N’ shaped Miniaturized Broadband Antenna”, *AEUE - International Journal of Electronics and Communications*, ISSN 1434-8411, Vol. 158, DOI: <https://doi.org/10.1016/j.aeue.2022.154465>. January 2023. **(SCIE Indexed) (IF – 3.86)**
8. Smarajit Maity, Tapas Tewary, **Avisankar Roy**, Kaushik Mandal, Sunandan Bhunia, “HEART” Shaped Broadband Hybrid Patch Antenna”, *International Journal of Microwave and Optical Technology*, ISSN: 1553-0396, Vol. 18, No. 3, May 2023. **(Scopus Indexed) (IF – 0.144)**

9. **Amit Bhattacharyya**, Debashis De, and Manash Chanda, "Ovarian-Cancer Biomarker (HE4) Recognition in Serum Using Hetero TFET Biosensor," *IEEE Trans. Nanotechnol.*, vol. 22, pp. 238- 244, doi: 10.1109/TNANO.2023.3272926, May 2023. **(SCI, I.F. - 2.4)**
10. Manash Chanda, Sharang Dhar Patel, **Amit Bhattacharyya**, and Shubham Sahay, "Impact of Transport Mechanism on Binding Kinematics and Sensitivity of FET Biosensors," *IEEE Trans. Electron Devices*, vol. 71, no. 1, pp. 359-367, doi:10.1109/TED.2023.3281539, June 2023. **(SCI, I.F. - 3.1)**
11. Tapas Tewary, Smarajit Maity, Arindum Mukherjee, **Avisankar Roy**, Sunandan Bhunia, "FSS Integrated High Gain Broadband Antenna", *Journal of Nano- And Electronic Physics*, ISSN: 2077-6772, DOI: 10.21272/jnep.15(3).03015, Vol. 15, No. 3, June 2023. **(Scopus Indexed) (IF – 0.425)**
12. Tapas Tewary, Smarajit Maity, **Avisankar Roy**, Sunandan Bhunia, "Wide Band Microstrip Patch Antenna with Enhanced Gain using FSS Structure", *Journal of Microwaves, Optoelectronics and Electromagnetic Applications*, ISSN: 2179-1074, DOI: <http://dx.doi.org/10.1590/217910742023v22i2273333>, Vol. 22, No. 2, pp. 329-345, June 2023. **(Scopus Indexed) (IF – 0.263)**
13. **K. Goswami**, H. P. Mondal, M. Sen, "Design of 1 to 2 line all optical decoder based on MMI phase shifter", *Optical and quantum electronics (Springer)*, (ISSN- 0306-8919), Vol. 55,pp-793, DOI: 10.1007/s11082-023-05055-6, June-2023. **(SCI, SCIE SCOPUS indexed) (IF-2.84)**
[<https://journalsearches.com/journal.php?title=OPTICAL%20AND%20QUANTUM%20ELECTRONICS>]
14. **K. Goswami**, H.P. Mondal, S. Dutta "Design and analysis of 1:2 line optical decoder based on linear optics", *E-prime advances in electrical engineering, electronics and energy*, (ISSN 2772-6711),vol5,pp-100190,doi.org/10.1016/j.prime.2023.100190, June-2023. **(SCOPUS indexed), (IF-0.976)**
[<https://journalsearches.com/journal.php?title=ePrime:%20Advances%20in%20Electrical%20Engineering,%20Electronics%20and%20Energy>]
15. **Raj Kumar Maity, Jagannath Samanta**, and Jaydeb Bhaumik, "Single and Double-adjacent Error Correcting Code (SDECC) with Lower Design Overheads and Mis-correction Rate for SRAMs", *Microsystem Technologies*, 29, pp 823–834, DOI: 10.1007/s00542-023-05464-3, May-2023. **(SCIE, IF=2.012, Q2)**

16. **Raj Kumar Maity, Jagannath Samanta,** and Jaydeb Bhaumik, "An Improved Single and Double-Adjacent Error Correcting Codec with Lower Decoding Overheads", *Journal of Signal Processing Systems*, 95, pp. 721–733, 10.1007/s11265-023-01875-7, May-2023. **(SCIE, IF=1.813, Q2)**
17. **D. Chowdhury,** B. Prasad De, S. DasMahapatra, M. Maiti, R. Kar, D. Mandal "Optimisation of sub-threshold and saturation parameters of gate stack double gate (GSDG) MOSFET using Moth-Flame optimization algorithm", *Materials Today: Proceedings*, Volume 79, Part 2, Pages 308-315, <https://doi.org/10.1016/j.matpr.2022.11.378>, 2023. **(SCOPUS indexed), (SJR-0.341)**
18. **D. Chowdhury,** B.P. De, B. Appasani, N. K. Singh, R. Kar, D. Mandal, N. Bizon and P. Thounthong "A Novel Dielectric Modulated Gate-Stack Double-Gate Metal-Oxide-Semiconductor Field-Effect Transistor-Based Sensor for Detecting Biomolecules", *Sensors*, vol. 23, issue 6, 2953. <https://doi.org/10.3390/s23062953>, 2023. **(SCIE Indexed) (IF – 3.847)**
19. M. K. Dash, S. Sinha, **Himadri Sekhar Das,** Gobinda Chandra De, Santanab Giri, Gourisankar Roymahapatra. "H₂ storage capacity of Li-doped five member aromatic heterocyclic superalkali complexes; an in silico study", *Sustainable Energy Technologies and Assessments*, Volume 52, Part C, 102235, <https://doi.org/10.1016/j.seta.2022.102235>, August 2022.
20. **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 Materials & Manufacturing*, 2023, 22, 841, DOI: 10.30919/esmm5f841.
21. Subir Kumar Maity, Arindam Basak, **Himadri Sekhar Das,** Study of scaling effect of ferroelectric gate stack in planar InGaAs MOSFET, *International Journal of Numerical Modelling Electronics Network Device and Fields*, 2022, <https://doi.org/10.1002/jnm.3059>.

International Conference – July 2022 to June 2023

1. **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", *Proc. Of 4th Int. Conf. on Communication, Devices and Computing (ICCDC 2023)*, Organized by dept. of Electronics and Communication Engineering, Haldia Institute of Technology, Haldia, WB, March 1-3, 2023, Published in Lecture Notes in *Electrical Engineering*, Springer, Vol. 1046, Chapter 54, ISBN: 978-981-99-2709-8, DOI : 10.1007/978-981-99-2710-4, 2023.

2. Kushal Roy, **Avisankar Roy**, Surajit Mukherjee, Dibyendu Chowdhury, Tirthadip Sinha, 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”, *2nd International conference on Advances in Power, Signal and Information Technology (APSIT 2023)*, organized by Department of Electrical & Electronics Engineering, Institute of Technical Education & Research, Faculty of Engineering & Technology, Siksha ‘O’ Anusandhan Deemed to be University, IEEE Xplore, 9-11 June 2023.
3. 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”, *3rd International Conference on Innovative Research in Renewable Energy Technologies (IRRET 2023)*, Organized by dept. of Electronics and Communication Engineering, IMPS College of Engineering and Technology, Malda, WB, 9-10 April 2023.
4. **Kushal Roy**, Avisankar Roy, **Surajit Mukherjee**, **Dibyendu Choudhury**, **Tirthadip Sinha**, 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”, *International Conference in Advances in Power, Signal, and Information Technology (APSIT)*, Organized by Siksha ‘O’ Anusandhan University, 9-11 June 2023, DOI: 10.1109/APSIT58554.2023.10201775, pp. 745-750, published by IEEE Xplore, 2023.
5. Subhadeep Paul, Madhusudan Maiti, **Dibyendu Chowdhury** and Subhas Chandra Saha, “Design of a Cost-Effective Remote Health Monitoring System Using IoT”, *Proc. Of 4th Int. Conf. on Communication, Devices and Computing (ICCDC 2023)*, Organized by dept. of Electronics and Communication Engineering, Haldia Institute of Technology, Haldia, WB, March 1-3, 2023, Published in Lecture Notes in *Electrical Engineering, Springer*, Vol. 1046, ISBN: 978-981-99-2709-8, DOI : 10.1007/978-981-99-2710-4, pp. 125-137. 2023.
6. Anitesh Anand, Niranjana Polai, Madhu Paswan, Manas Mishra, **Chanchal Kumar De** and Debasis De, “Nanorod Shaped TiO₂ Photoanode and Mixed Halide Absorber-Based Perovskite Solar Cell Device Fabrication”, *Proc. Of 4th Int. Conf. on Communication, Devices and Computing (ICCDC 2023)*, Organized by dept. of Electronics and Communication Engineering, Haldia Institute of Technology, Haldia, WB, March 1-3, 2023, Published in Lecture Notes in *Electrical Engineering, Springer*, Vol. 1046, ISBN: 978-981-99-2709-8, DOI : 10.1007/978-981-99-2710-4, pp. 217-228, 2023.
7. Manas Pandey, Anjali Chauhan, **Dibyendu Chowdhury** and Suddhendu DasMahapatra, “Experimental Investigation on Spectrum Sensing Testbed Using GNU Radio and SDR”, *Proc. Of 4th Int. Conf. on Communication, Devices and Computing (ICCDC 2023)*, Organized by dept. of Electronics and Communication Engineering, Haldia Institute of Technology, Haldia, WB, March 1-3, 2023, Published in Lecture Notes in *Electrical Engineering, Springer*, Vol. 1046, ISBN: 978-981-99-2709-8, DOI : 10.1007/978-981-99-2710-4, pp. 303-308, 2023.

8. **Sachindeb Jana, Kosalaya Chakrabarti**, and Angsuman Sarkar, “Optimization of Different Parameters of One Bit Full Adder Using QCA Technology”, *Proc. Of 4th Int. Conf. on Communication, Devices and Computing (ICCDC 2023)*, Organized by dept. of Electronics and Communication Engineering, Haldia Institute of Technology, Haldia, WB, March 1-3, 2023, Published in Lecture Notes in *Electrical Engineering, Springer*, Vol. 1046, ISBN: 978-981-99-2709-8, DOI : 10.1007/978-981-99-2710-4, pp. 333-345, 2023.
9. **Kushal Roy, Tilak Mukherjee** and 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”, *Proc. Of 4th Int. Conf. on Communication, Devices and Computing (ICCDC 2023)*, Organized by dept. of Electronics and Communication Engineering, Haldia Institute of Technology, Haldia, WB, March 1-3, 2023, Published in Lecture Notes in *Electrical Engineering, Springer*, Vol. 1046, ISBN: 978-981-99-2709-8, DOI : 10.1007/978-981-99-2710-4, pp. 367-377, 2023.
10. Sweta Bijali Maity, **Raj Kumar Maity, Jagannath Samanta** and **Chanchal Kumar De**, “An Efficient SEC-DAEC Code for Protecting Data Bits in IoT Devices”, *Proc. Of 4th Int. Conf. on Communication, Devices and Computing (ICCDC 2023)*, Organized by dept. of Electronics and Communication Engineering, Haldia Institute of Technology, Haldia, WB, March 1-3, 2023, Published in Lecture Notes in *Electrical Engineering, Springer*, Vol. 1046, ISBN: 978-981-99-2709-8, DOI : 10.1007/978-981-99-2710-4, pp. 391-400, 2023.
11. **Tapan Maity**, Pranabendu Giri, Rohit Sasmal, Niladri Biswas, Sourav Das, **Raj Kumar Maity**, Prabir Saha, and **Jagannath Samanta**, “Design of Smart IoT-Based Gas Leakage Detection and Prevention Devices for Hydrogen Station”, *Proc. Of 4th Int. Conf. on Communication, Devices and Computing (ICCDC 2023)*, Organized by dept. of Electronics and Communication Engineering, Haldia Institute of Technology, Haldia, WB, March 1-3, 2023, Published in Lecture Notes in *Electrical Engineering, Springer*, Vol. 1046, ISBN: 978-981-99-2709-8, DOI : 10.1007/978-981-99-2710-4, pp. 531-546, 2023.
12. **Tirthadip Sinha** and Jaydeb Bhaumik, “Efficient and Novel Architecture of Golay Encoder and Decoder for McEliece Cryptosystem”, *Proc. Of 4th Int. Conf. on Communication, Devices and Computing (ICCDC 2023)*, Organized by dept. of Electronics and Communication Engineering, Haldia Institute of Technology, Haldia, WB, March 1-3, 2023, Published in Lecture Notes in *Electrical Engineering, Springer*, Vol. 1046, ISBN: 978-981-99-2709-8, DOI : 10.1007/978-981-99-2710-4, pp. 547-561, 2023.
13. **Dipak Samanta, Chanchal Kumar De**, and Abhijit Chandra, “Performance Analysis of Energy Harvesting-Based CR Network Assisted by Full-Duplex Relays Under Joint Underlay/Overlay Mode”, *Proc. Of 4th Int. Conf. on Communication, Devices and Computing (ICCDC 2023)*, Organized by dept. of Electronics and Communication Engineering, Haldia Institute of Technology, Haldia, WB, March 1-3, 2023, Published in Lecture Notes in *Electrical Engineering*,

Springer, Vol. 1046, ISBN: 978-981-99-2709-8, DOI : 10.1007/978-981-99-2710-4, pp. 617-631, 2023.

14. Rajrup Saha, **Avishek Das**, Durbadal Mandal and Rajib Kar, “An Optimal Circular Antenna Array Design for an Efficient 5G Communication System Using Krill Herd Optimization”, *Proc. Of 4th Int. Conf. on Communication, Devices and Computing (ICCDC 2023)*, Organized by dept. of Electronics and Communication Engineering, Haldia Institute of Technology, Haldia, WB, March 1-3, 2023, Published in Lecture Notes in *Electrical Engineering, Springer*, Vol. 1046, ISBN: 978-981-99-2709-8, DOI : 10.1007/978-981-99-2710-4, pp. 647-655, 2023.
15. Satyanarayana Talam, Ayesha Begum, M. B. Chakravarthi, **Tilak Mukherjee**, Poornaiah Billa, and Rambabu Busi, “Impact of Stress Concentrated Region on MEMS-Based Piezoelectric Energy Harvester”, *Proc. Of 4th Int. Conf. on Communication, Devices and Computing (ICCDC 2023)*, Organized by dept. of Electronics and Communication Engineering, Haldia Institute of Technology, Haldia, WB, March 1-3, 2023, Published in Lecture Notes in *Electrical Engineering, Springer*, Vol. 1046, ISBN: 978-981-99-2709-8, DOI : 10.1007/978-981-99-2710-4, pp. 657-664, 2023.
16. **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”, *Proc. Of 4th Int. Conf. on Communication, Devices and Computing (ICCDC 2023)*, Organized by dept. of Electronics and Communication Engineering, Haldia Institute of Technology, Haldia, WB, March 1-3, 2023, Published in Lecture Notes in *Electrical Engineering, Springer*, Vol. 1046, ISBN: 978-981-99-2709-8, DOI : 10.1007/978-981-99-2710-4, pp. 685-705, 2023.
17. **Amit Bhattacharyya**, Ayush Sarkar, Swapnendu Sarkar, Shristi Das, Soumyadeep Ghosh, Papiya Debnath, Debashis De, and Manash Chanda, “Charge-Plasma Persuaded Underlapping Dielectric Modulated Bio-Tunnel FET Realizing Repulsive Steric Effect” IEEE 5NANO 2023, Apr. 27-28, 2023, organized by IEEE Photonics Society Student Chapter, VISAT Engineering College, Ernakulam, Kerala, India, IEEE Xplore, 978-1-6654-3726-4/23/ \$31.00 ©2023, IEEE. (Best Paper Award)
18. **Amit Bhattacharyya**, Nitik Das, Kaustav Mukherjee, Sneha Bose, Papiya Debnath, Debashis De, and Manash Chanda, “Doping-Less Underlapped Dielectric Modulating Tunnel FET Biosensor Accomplishing Repulsive Steric Hindrance” IEEE EDKCON-2022, Organized by IEEE EDS Kolkata Chapter, Nov. 26-27, 2022, IEEE Xplore, 978-1-6654-7205-0/22/\$31.00 ©2022 IEEE.
19. **Avishek Das**, An Efficient Electromagnetic Bandgap Structure Design for Surface Wave Suppression, International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT), IEEE Xplore, pp. 1-3, Bhilai, India, April 21-22, 2022.

Book Chapters – July 2022 to June 2023

1. N.K. Singh, R. Kar, D. Mandal, **D. Chowdhury**, “Design and Temperature Analysis of Si_{0.8}Ge_{0.2}-Based Extended Gate Gate-All-Around TFET”. In: Lenka, T.R., Misra, D., Fu, L. (eds) Micro and Nanoelectronics Devices, Circuits and Systems. **Lecture Notes in Electrical Engineering**, vol 904 (2022) pp-31-39. Springer, Singapore. https://doi.org/10.1007/978-981-19-2308-1_4, September 2022. [**Scopus Indexed**]
2. **D. Chowdhury**, B.P. De, S. Ghosh, N.K. Singh, R. Kar, D. Mandal, “Optimization of Subthreshold Parameters of Graded-Channel Gate-Stack Double-Gate (GC-GS-DG) MOSFET Using PSO-CFIWA”. In: Lenka, T.R., Misra, D., Fu, L. (eds) Micro and Nanoelectronics Devices, Circuits and Systems. **Lecture Notes in Electrical Engineering**, vol 904 (2022) pp-41-50. Springer, Singapore. https://doi.org/10.1007/978-981-19-2308-1_5, September 2022. [**Scopus Indexed**]
3. A.K Singh, R. Singh, **D. Chowdhury**, A. Rathi, “Optical Response in Strained Type-II AlInAs/AlSb Ultrathin QW Heterostructure”. In: Dwivedi, S., Singh, S., Tiwari, M., Shrivastava, A. (eds) Flexible Electronics for Electric Vehicles. **Lecture Notes in Electrical Engineering**, vol 863. 2023, pp 569-575, Springer, Singapore. https://doi.org/10.1007/978-981-19-0588-9_56, 2023. [**Scopus Indexed**]
4. **A. Bhattacharyya**, S. Paul, P. Debnath, D. De, M. Chanda, “Performance Assessment of Electrostatically Doped Dual Pocket Vertical Tunnel Field-Effect Transistor”. In: Lenka, T.R., Misra, D., Fu, L. (eds) Micro and Nanoelectronics Devices, Circuits and Systems. **Lecture Notes in Electrical Engineering**, vol 904, pp. 227-238, Springer, Singapore. https://doi.org/10.1007/978-981-19-2308-1_24, September 2022. [**Scopus Indexed**]
5. S. Tapna, **K. Chakrabarti**, D. Mukhopadhyay, “A Secure Communication Gateway with Parity Generator Implementation in QCA Platform”, In: Mukhopadhyay, S., Sarkar, S., Dutta, P., Mandal, J.K., Roy, S. (eds) Computational Intelligence in Communications and Business Analytics. CICBA 2022. Communications in Computer and Information Science, vol. 1579, Springer, Cham. https://doi.org/10.1007/978-3-031-10766-5_15. [**Scopus Indexed**]
6. **Tilak Mukherjee**, “A Literature survey on the emerging trends in the telecommunications”, *Handbook of Trends in Engineering Technology and Research-AGPH*, vol. 1, ISBN: 978-93-94339-64-4, Aug 2022 .
7. **Himadri Sekhar Das**, Santanu Mishra, Gourisankar Roy Mahapatra, Takashiro Akitsu, Reviews on Electromagnetic Interference/Compatibilities, , Book-Advances in Microwave Engineering, CRC Press Taylor & Francis Group, LLC., eBook ISBN9781003459880.

Books – July 2022 to June 2023

1. **Santanu Maity, Pinaki Satpathy**, “Design and Implementation of Low Power Carry Skip Adder”, *Lap Lambert Academic Publishing, Germany*, ISBN: 978-620-5-49293-2, August-2022, Pages-72.

Patent – July 2022 to June 2023

1. **Applicant Name:** Dr. Avisankar Roy
Application No.: 202341006632
Date of filing of Application: 01/02/2023
Title of the invention: ELECTRICITY DEMAND FORECASTING IN INDUSTRIAL AND RESIDENTIAL FACILITIES USING ENSEMBLE MACHINE LEARNING
Publication Date: 24/02/2023
Published in The Patent Office Journal No. 08/2023, Dated 24/02/2023; Page No. 12764
2. Applicant Name: **Dibyendu Chowdhury**
Application No.: 20 2022 103 047 2,
Date of filing of Application: 31/05/2022
Title of the invention: A RuO₂/Pb(Zr_{0.52}Ti_{0.48})O₃/RuO₂ metal-insulator-metal device using the Solgel spin coating method.
Publication Date: 11/07/2022
3. Applicant Name: **Dibyendu Chowdhury**
Application No.: 202341011888,
Date of filing of Application: 20/02/2023
Title of the invention: AI BASED HEALTH CARE SYSTEM USING CLOUD COMPUTING IN SMART CITIES
Publication Date: 17/03/2023
Published in: The Patent Office Journal No. 11/2023, Dated 17/03/2023; Page No. 27206
4. Applicant Name: **Dr. Banibrata Bag**
Application No.: 202341006632
Date of filing of Application: 01/02/2023
Title of the invention: ELECTRICITY DEMAND FORECASTING IN INDUSTRIAL AND RESIDENTIAL FACILITIES USING ENSEMBLE MACHINE LEARNING
Publication Date: 24/02/2023
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