

## International journals – July 2021 to June 2022

1. Tapas Tewary, Smarajit Maity, **Surajit Mukherjee**, **Avisankar Roy**, Partha Pratim Sarkar, Sunandan Bhunia, “Design of High Gain Broadband Microstrip Patch Antenna for UWB/X/Ku Band Applications”, *AEUE - International Journal of Electronics and Communications*, ISSN 1434-8411, Vol. 139, DOI: [10.1016/j.aeue.2021.153905](https://doi.org/10.1016/j.aeue.2021.153905), July 2021. **(SCIE Indexed) (IF – 3.183)**
2. **Jagannath Samanta** and Akash Kewet, “Compact and High Speed Hsiao Based SEC-DED Code for Cache Memory”, *Journal of Circuits, Systems, and Computers (World Scientific)*, ISSN (print): 0218-1266 | ISSN (online): 1793-6454, Vol-31, No-01, July, 2021, <https://doi.org/10.1142/S0218126622500049>. **(SCIE, IF=1.363)**
3. **Pinaki Satpathy**, **Santanu Maity**, “A Nobel Approach of designing a 4 Bit Carry Skip Adder using Reversible Logic”, *Journal of VLSI Design Tools & Technology-JoVDTT (STM Journals)*, Vol. 11, Issue 2, and ISSN: 2249-474X, pp. 24-34, November 2021.
4. **Amit Bhattacharyya**, Manash Chanda, and Debashis De, “Sensitivity Measurement for Bio-TFET Considering Repulsive Steric Effects With Better Accuracy,” *IEEE Trans. Nanotechnol*, vol. 21, pp. 100-109, 2022, doi: 10.1109/TNANO.2022.3148922, 2022.
5. **Akinchan Das**, **Banibrata Bag**, Chayanika Bose and Aniruddha Chandra, “Performance analysis of FSO links employing a transmit and receive diversity-based operating system under Málaga turbulence channels with pointing errors”, *Optics Continuum*, Vol-1, Issue-2, pp.-399-387, Feb 2022.
6. **Surajit Mukherjee**, **Avisankar Roy**, Smarajit Maity, Tapas Tewary, Partha Pratim Sarkar, Sunandan Bhunia, “A Design of Dual Band-Notched UWB Hexagonal Printed Microstrip Antenna”, *International Journal of Microwave and Wireless Technologies*, ISSN: 1759-0787 (Print), 1759-0795 (Online). **(Accepted) (SCIE Indexed)(IF – 0.976)**
7. Shahriar Mostufa, Alok Kumar Paul, **Kisalaya Chakrabarti** “Detection of Hemoglobin in Blood and Urine Glucose level samples using Graphene-coated SPR based Bio-sensor”, *OSA Continuum*, DOI: 10.1364/OSAC.433633, July 2021.
8. **Kisalaya Chakrabarti**, Mohammad Obaidat, Shahriar Mostufa, and Alok Kumar Paul “Design and Analysis of Multi-Core Whispering Gallery Mode Bio-Sensor with Detection of Cancer cells and Diabetes Tear cells”, *OSA Continuum*, DOI: 10.1364/OSAC.431883, July 2021.
9. **Kisalaya Chakrabarti**, Shahriar Mostufa, and Alok Kumar Paul "Design and Analysis of Position Chirped Metamaterial Photonic Crystal Array for Confinement of Light Pulse" Accepted in *Journal of Optics*, IOP publication, Vol. no. 23, pp. 115201-115211, DOI:10.1088/2040-8986/ac2164, October 2021.
10. **Tilak Mukherjee**, Angshuman Majumdar, Sankar Gangopadhyay, “ Effect of Kerr Nonlinearity on Signal and Pump Intensities in EDFA comprising Single-Mode Step Index Fiber: Estimation by a Simple but Accurate Mathematical Formalism", *Results in Optics (Elsevier)*, ISSN: 2666-9501, vol. 8, 100263, June 2022. <https://doi.org/10.1016/j.rio.2022.100263>, 2022.

11. **Avishek Das**, Durbadal Mandal, Rajib Kar, “An Optimal Radiation Pattern Synthesis and Correction of Mutually Coupled Circular Dipole Antenna Array”, *Scientia Iranica*, Vol. 29, Issue.3, pp. 1455-1474, 2022. (doi. 10.24200/SCI.2020.53745.3393). (Sharif University of Technology)

## International Conference – July 2021 to June 2022

1. **Raj Kumar Maity, Jagannath Samanta**, and Jaydeb Bhaumik, “An Improved SEC-DED-DAEC Code for SRAMs”, 4<sup>th</sup> International Conference on ‘Energy Systems, Drives and Automations’, ESDA2021, Dec-2021. pp. xxx.
2. **Amit Bhattacharyya**, Shaonli Paul, Papiya Debnath, Debashis De, and Manash Chanda “Performance Assessment of Electrostatically Doped Dual Pocket Vertical Tunnel Field Effect Transistor,” 2nd International Conference on Micro/Nanoelectronics Devices, Circuits and Systems (MNDACS-2022), Jan. 29-31, 2022, NIT Silchar, Assam, India. (Virtual Mode)
3. **Amit Bhattacharyya**, Madhusree Banerjee, Papiya Debnath, Debashis De, and Manash Chanda, “RF/Analog Performance Analysis of Electrostatically Doped Dual Pocket Vertical Tunnel Field Effect Transistor,” IEEE VLSI DCS-2020: 3<sup>rd</sup> IEEE Conference on VLSI Device, Circuit and System, Feb. 26-27, 2022, IEEE Electron Device MSIT Student Branch Chapter, Meghnad Saha Institute of Technology, Kolkata, WB, India.

## Book Chapters – July 2021 to June 2022

1. **Jagannath Samanta, Raj Kumar Maity**, Debnath Ghosh, and **Sudipta Bardhan**, “Performance Analysis of Barlekamp-Massey based KES block for 3-Byte RS Decoder”, Lecture Notes in *Electrical Engineering, Springer*, Vol. 851, pp. 15-24, ISBN 978-981-16-9153-9, Jan 2022. [**Scopus Indexed**]
2. **Raj Kumar Maity, Jagannath Samanta**, and Jaydeb Bhaumik, “An Efficient Decoding of SEC-DED-DAEC Code with Odd-Column-Weight H-matrix”, Lecture Notes in *Electrical Engineering, Springer*, Vol. 851, pp. 689-698, ISBN 978-981-16-9153-9, Jan 2022. [**Scopus Indexed**]
3. **Tilak Mukherjee**, Angshuman Majumdar, Sankar Gangopadhyay, “Accurate Estimation of Dimensionless Vector And Scalar Propagation Constants For First Higher Order Mode of Kerr Type Nonlinear Graded Index Fiber by Simple Mathematical Formalism”, Lecture Notes in *Electrical Engineering, Springer*, Vol. 851, pp. 191-200, ISBN 978-981-16-9153-9, Jan 2022. [**Scopus Indexed**]
4. **Kushal Roy**, Angshuman Majumdar, Sankar Gangopadhyay, “A simple but accurate mathematical formalism for prediction of the far field pattern of first higher order (LP11) mode in Kerr type nonlinear step index optical fiber”, Lecture Notes in *Electrical Engineering, Springer*, Vol. 851, pp. 169-178, ISBN 978-981-16-9153-9, Jan 2022. [**Scopus Indexed**]
5. **Surajit Mukherjee**, Smarajit Maity, Tapas Tewary, **Avisankar Roy**, Sunandan Bhunia, “Design of dual band rejected Square UWB microstrip antenna”, Lecture Notes in *Electrical Engineering, Springer*, Vol. 851, pp. 477-486, ISBN 978-981-16-9153-9, Jan 2022. [**Scopus Indexed**]

6. **Jayanta Kumar Bag, Dipak Samanta, Chanchal Kumar De**, Abhijit Chandra, “Outage Analysis of Joint Underlay/Overlay CR Network”, Lecture Notes in *Electrical Engineering, Springer*, Vol. 851, pp. 537-550, ISBN 978-981-16-9153-9, Jan 2022. **[Scopus Indexed]**
7. Smarajit Maity, Tapas Tewary, **Surajit Mukherjee, Avisankar Roy**, Sunandan Bhunia, “Compact Broadband Antenna using Modified Ground Plane”, Lecture Notes in *Electrical Engineering, Springer*, Vol. 851, pp. 25-32, ISBN 978-981-16-9153-9, Jan 2022. **[Scopus Indexed]**
8. M. Hussayeen Khan Anik, Sakib Mahmud, Pratyayee Chakma, Hriteshwar Talukder, **Kisalaya Chakrabarti**, and Shovasis Kumar Biswas, “A Highly Sensitive and Ultra-Low Loss Photonic Crystal Fiber-Based Gas and Chemical Sensor”, Lecture Notes in *Electrical Engineering, Springer*, Vol. 851, pp. 33-44, ISBN 978-981-16-9153-9, Jan 2022. **[Scopus Indexed]**
9. N.K. Singh, R. Kar, D. Mandal, **D. Chowdhury**, “Investigation of Extended Gate-On-Source and Charge-Plasma-Based Gate-All-Around TFET for Improved Analog Performance”. In: Mandal, J.K., Hsiung, P.A., Sankar Dhar, R. (eds) Topical Drifts in Intelligent Computing. ICCTA 2021. Lecture Notes in Networks and Systems, pp-253-262, vol 426. Springer, Singapore. [https://doi.org/10.1007/978-981-19-0745-6\\_27](https://doi.org/10.1007/978-981-19-0745-6_27), April 2022.

## Books – July 2021 to June 2022

1. Ramkrishna Rakshit, G. Nivetha, Krishna Priya M, **Sachindeb Jana**, “Digital Systems, Published by Scientific International Publishing House, ISBN: 978-93-94002-95-1, 2022.

## Patent – July 2021 to June 2022

1. Applicant Name: **Dr. Avisankar Roy**  
 Application No.: 202141056091  
 Date of filing of Application: 03/12/2021  
 Title of the invention: SENSOR BASED INTELLIGENT ROBOTIC COOKING KITCHEN USING HAPTIC TECHNOLOGY  
 Publication Date: 10/12/2021  
 Published in The Patent Office Journal No. 50/2021, Dated 10/12/2021; Page No. 60151
2. Applicant Name: **Tilak Mukherjee**  
 Application No.: 1188348  
 Date of filing of Application: 22/11/2021 (Canadian Patent)  
 Title of the invention: OPERATING METHOD FOR AN IMAGE GENERATING MEDICAL ENGINEERING ASSEMBLY  
 Publication Date: 04/01/2022  
<https://www.ic.gc.ca/app/opic-cipo/cpyrghts/dtls.do?fileNum=1188348&type=1&lang=eng>
3. Applicant Name: **Mr. Kushal Roy**  
 Application No.: 202141056911

Date of filing of Application: 07/12/2021

Title of the invention: SENSOR BASED INTELLIGENT WEARABLE DEVICE TO  
MONITOR BLOOD GLUCOSE LEVELS OF A DIABETES PATIENT AND  
GENERATE INSULIN USING ARTIFICIAL PANCREAS.

Publication Date: 10/12/2021

Published in The Patent Office Journal No. 50/2021, Dated 10/12/2021; Page No. 60207