**Details of Research Publications in Indexed Journal**

**Session 2023-24**

1. **Shivam Singh,** Anurag Upadhyay, Bhargavi Chaudhary, Kapil Sirohi, Santosh Kumar, (2023) “Enhanced Cu-Ni-TiO2-BP Plasmonic Biosensor for Highly Sensitive Biomolecule Detection and SARS-CoV-2 Diagnosis”, ***IEEE Sensors Journal,*** vol. 24, no.1, pp.254-261.DOI: 10.1109/JSEN.2023.3334104
2. **Shivam Singh,** Bhargavi Chaudhary, Rajeev Kumar, Anurag Upadhyay, Santosh Kumar, (2024) “A Numerical Analysis of Rectangular Open Channel Embedded TiO-Au-MXene Employed PCF Biosensor for Brain Tumor Diagnosis”, ***IEEE Sensors Journal,*** DOI: 10.1109/JSEN.2024.3386395
3. Rajeev Kumar, **Shivam Singh,** Bhargavi Chaudhary, Santosh Kumar, (2024) “Black Phosphorus based Surface Plasmon Resonance Biosensor for DNA Hybridization”, ***IEEE Transactions on Plasma Science,*** DOI: 10.1109/TPS.2024.3386399
4. A.H.M. Almawgan, D.N. Alhamss, S.A. Taya, A.T. Hindi, A. Upadhyay, **Shivam Singh,** I. Colak, A. Pal, S.K. Patel, (2023) “Theoretical Analysis of a Refractive Index Sensor based on a Photonic Crystal Fiber with a Rectangular Core”, ***Opt. Quant. Electron***., vol. 55, 881. doi: 10.1007/s11082-023-05172-2.
5. A.H.M. Almawgan, D.N. Alhamss, S.A. Taya, A.T. Hindi, A. Upadhyay, **Shivam Singh,** I. Colak, A. Pal, S.K. Patel, (2023) “Numerical Analysis of a Photonic Crystal Fiber-Based Biosensor for the Detection of Vibrio Cholera and Escherichia Colibacteria in the THz Regime”, ***Phys. Status Solidi A****.* doi: 10.1002/pssa.202300622.
6. P. Jha, A. Kumar, **N.** **Sharma,** (2023) “A Metamaterial Inspired Split Ring Resonator Accomplished Multiband Antenna for 5G and Other Wireless Applications,” ***Rev. Roum. Sci. Tech. - Électrotech. Énerg*.**, 68(2), 127–131. <https://doi.org/10.59277/RRST-EE.2023.68.2.2>
7. A. Kumar, D. Saxena, **N. Sharma,** P. Jha, (2023) “Compact Two-Port Antenna with High Isolation Based on the Defected Ground for THz Communication”, ***Results Opt*.** doi: 10.1016/j.rio.2023.100522.
8. S. Srivastava, **S.K. Singh,** U. Tiwari, (2023) “Optimization of Metamaterial Unit Cell using Radial Basis Function Neural Network”, ***Opt. Mem. Neural Networks***, vol. 32, pp. 204–218. doi: 10.3103/S1060992X23030098.
9. P. Tyagi, **S.K. Singh,** P. Dua, (2023) “Ultra-Low Power 8-Transistor Modified Gate Diffusion Input Carbon Nano-Tube Field Effect Transistor Full Adder”, ***IETE J. Res*.**, 69(8), 5518–5531. doi: 10.1080/03772063.2021.1962746.
10. G. Saxena, M. Alam, **M. Roy,** A.B. Barnawi, T.M.Y. Khan, R.L. Yadava, S. Chintakindi, R. Jain, H. Singh, Y.K. Awasthi, (2023) “CSRR Loaded Multiband THz MIMO Antenna for Nano-communications and Bio-sensing Applications”, ***Nano Commun. Networks****.* doi: 10.1016/j.nancom.2023.100481.
11. **R. Agarwal,** R. Bhatia, (2023) “Multipath Routing using Genetic Algorithm in an Elastic Optical Network”, ***J. Opt.*** doi: 10.1007/s12596-023-01395-4.

**Details of Research Publications in Indexed Conference Session 2023-24**

1. N. Sharma, A. Kumar, P. Jha and D. Saxena, (2023) “Circularly Polarized Triangular-shaped Antenna and modified Inclined-shaped defected ground for Fixed Satellite Communication Applications”, International Conference on Artificial Intelligence and Smart Communication (AISC), Greater Noida, India,pp. 1445-1448, doi: 10.1109/AISC56616.2023.10085650.
2. P. Jha, A. Kumar, N. Sharma and D. Saxena, (2023) “CSRR Loaded Compact Textile Antenna with Defected Ground for Wearable 5G and Wi-Fi 6E Applications”, 2nd International Conference on Paradigm Shifts in Communications Embedded Systems, Machine Learning and Signal Processing (PCEMS), Nagpur, India, pp. 1-5, doi: 10.1109/PCEMS58491.2023.10136047.
3. A. Kumar, D. Saxena, N. Sharma and R. K. Verma, (2023) “Elephant head-shaped Radiator based on Tripleband MIMO Antenna with Shorting Pins and Neutralization strip in ground used for Enhanced Isolation”, 10th International Conference on Signal Processing and Integrated Networks (SPIN), Noida, India, pp. 578-583, doi: 10.1109/SPIN57001.2023.10116717.
4. A. Kumar, D. Saxena, P. Jha and N. Sharma, (2023) “Parasitic and Open slot-based Circular polarized Two-port Antenna for ISM applications”, International Conference on Artificial Intelligence and Smart Communication (AISC), Greater Noida, India, pp. 332-337, doi: 10.1109/AISC56616.2023.10085544.
5. A. Kumar, D. Saxena, N. Sharma and A. Gankotiya, (2023) “Shorting pin and SRR loaded multi-band Antenna for 4G/5G/Wi-Fi/WiMAX and IOT Applications”, International Conference on Artificial Intelligence and Smart Communication (AISC), Greater Noida, India, pp. 303-307, doi: 10.1109/AISC56616.2023.10085352.
6. Manish, N. Sharma and N. P. Gupta, (2023) “Dual Band Microstrip Patch Antenna for maritime navigation as well as fixed satellite and mobile communication”, International Conference on Sustainable Emerging Innovations in Engineering and Technology (ICSEIET), Ghaziabad, India, pp. 910-912, doi: 10.1109/ICSEIET58677.2023.10303505.
7. S. Bisariya and N. Afzal, (2023) “Reconfigurable Monostable Multivibrator Using Bulk-Driven Current Conveyor Transconductance Amplifier”, International Conference on Sustainable Emerging Innovations in Engineering and Technology (ICSEIET), Ghaziabad, India, pp. 895-898, doi: 10.1109/ICSEIET58677.2023.10303526.

**Details of Research Publications in Indexed Journal Session 2022-23**

1. **N. Sharma**, A. Kumar, A. De, and R. K. Jain, (2022) “Isolation Enhancement using CSRR Slot in the Ground for Compact Two-Element Textile MIMO Antenna,” ***ACES J.***, vol. 37, no. 5, pp. 535–545.
2. **M. Zadoo**, M. Sharma, and A. Choudhary, (2022) “FEELS: fuzzy based energy efficient and low SAR routing protocol for wireless body area networks,” ***Wireless Netw***., vol. 28, pp. 3593–3611, doi: 10.1007/s11276-022-03078-7.
3. **Shivam Singh** et al., (2023) “A Review on Various Sensing Prospects of SPR Based Photonic Crystal Fibers, ***Photonics and Nanostructures-Fundamentals and Applications***, vol.54, 101119 doi: 10.1016/j.photonics.2023.101119.
4. **Shivam Singh** et al., (2023) “Bottom side partially etched-shaped PCF biosensor for early diagnosis of cancer cells,” ***Eur. Phys. J. Plus,*** vol.138. doi: 10.1140/epjp/s13360-023-04133-8.
5. H. M. Almawgan, **Shivam Singh** et al., (2023) “Identification of four detrimental chemicals using square-core photonic crystal fiber in the regime of THz,” ***J. Appl. Phys.*** doi: 10.1063/5.0152927.
6. **S. K. Singh, P. Bhardwaj, and M. Roy**, (2023) “Performance Analysis of FSO for Various Modulation Scheme in Atmospheric Turbulence,” ***Eur. Chem. Bull***., doi: 10.48047/ecb/2023.12.si7.006.
7. **R. Kumari** and S. Srivastava, (2023) “Gain Enhancement at Selective Frequency of HMSIW Based Leaky Wave Antenna,” ***Int. J. Microw. Opt. Technol***., vol.18, p256.
8. **P. Bhardwaj** et al., (2023) “A two-center, retrospective cohort trial of a tumor necrosis factor inhibitor coupled with intravenous immunoglobulin and heparin for the treatment of recurrent spontaneous abortion”, ***Eur. Chem. Bull.*** doi: 10.48047/ecb/2023.12.si4.568.
9. **G. Raj**, (2023) “Performance Comparison of Several LPWAN Technologies for Energy Constrained IOT Network,” IJISAE.
10. **A. Suri**, R.V.S. Bhadauria, Lokesh Kumar Bansal, H. R. Singh, (2022) “Future Aspects of 6G Wireless Communication Technology,” ***Neuro Quantology,*** vol.20, issue 12, pp.757-758. DOI: 10.14704/NQ.2022.20.12. NQ77059

**Book Chapter**

R. Yadav and S. Yadav, (2023) “Low Power Architectures for IoT Applications”, Springer Tracts in Electrical and Electronics Engineering (STEEE), April 2023

**Details of Research Publications in Indexed Conference Session 2022-23**

1. Bisariya, S., Afzal, N. (2023) “Sinusoidal Oscillator Using CCCCTA” In: Reddy, V.S., Prasad, V.K., Wang, J., Reddy, K.T.V. (eds) Soft Computing and Signal Processing. ICSCSP 2022. Smart Innovation, Systems and Technologies, vol 313. Springer, Singapore. <https://doi.org/10.1007/978-981-19-8669-7_57>
2. A.Kumar, N. Sharma, D. Saxena, P. Jha and P. Sharma,(2022) “Four Element Pattern Diversity MIMO antenna with Parasitic Decoupling structure and SRR WLAN notch for UWB application,” 10th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), Noida, India, pp. 1-6, doi: 10.1109/ICRITO56286.2022.9964517.
3. Raj, G., Sharma, U., Yadav, R., Bhardwaj, A., Yadav, S. (2022) “Hassle-Free Food Ordering Superintendence” In: Sanyal, G., Travieso-González, C.M., Awasthi, S., Pinto, C.M., Purushothama, B.R. (eds) International Conference on Artificial Intelligence and Sustainable Engineering. Lecture Notes in Electrical Engineering, vol 837. Springer, Singapore. <https://doi.org/10.1007/978-981-16-8546-0_22>
4. Sharma, U., Singh, P., Awasthi, M. (2023) “Non-Orthogonal Multiple Access (NOMA) for 5G Radio Technology” In: Khanna, A., Gupta, D., Kansal, V., Fortino, G., Hassanien, A.E. (eds) Proceedings of Third Doctoral Symposium on Computational Intelligence. Lecture Notes in Networks and Systems, vol 479. Springer, Singapore. <https://doi.org/10.1007/978-981-19-3148-2_44>
5. Dubey, A.K., Saraswat, M., Kapoor, R., Gupta, R. (2022) “Examine the Indian Tweets to Determine Society Emphasis on Novel Corona-Viruses (COVID-19)” In: Singh, P.K., Singh, Y., Chhabra, J.K., Illés, Z., Verma, C. (eds) Recent Innovations in Computing. Lecture Notes in Electrical Engineering, vol 855. Springer, Singapore. <https://doi.org/10.1007/978-981-16-8892-8_44>
6. R. Kumari and S. Srivastava, (2022) “Leaky Wave Antenna in Quarter Mode SIW Filter," 2022 International Conference for Advancement in Technology (ICONAT), Goa, India, 2022, pp. 1-5, doi: 10.1109/ICONAT53423.2022.9725868.
7. Alam, M.S., Agrawal, A., Singh, K., Shrivastava, A. (2023) “Realization of Universal Filter Using CCII” In: Dwivedi, S., Singh, S., Tiwari, M., Shrivastava, A. (eds) Flexible Electronics for Electric Vehicles. Lecture Notes in Electrical Engineering, vol 863. Springer, Singapore. <https://doi.org/10.1007/978-981-19-0588-9_39>