SRM Institute of Science and Technology				
College of Engineering and Technology				
Department of Electronics and Communication Engineering				
Academic Year 2022-2023				
Scientific Citation Indexed Publications				
Faculty Name	**Count**	**Article title**	**Name of journal**	**DOI**
Dr. Shanthi Prince	1	Modal analysis of silicon-on-insulator based rib waveguide using fully vectorial finite-difference mode solver	Laser Phys.	10.1088/1555-6611/ac9ec0
Dr. S. Malarvizhi	2	Multicast Spatial Filter Beamforming with Resource Allocation Using Joint Multi-objective Optimization Approaches in Wireless Powered Communication Networks	Wireless Personal Communication	https://doi.org/10.1007/s11277-023-10242-5
		Automated Detection of Threat Materials in X-Ray Baggage Inspection System (XBIS)	IEEE Transactions on Nuclear Science	https://doi.org/10.1109/TNS.2022.3182771.
Dr. P. Aruna Priya	3	Identification of Attention-Deficit-Hyperactivity Disorder Subtypes Based on Structural MRI Grey Matter Volume and Phenotypic Information	Current Medical Imaging	10.2174/1573405619666230119144142
		Si-SiO 2 Clustery Random Photonic Crystal Based Thermo-Optic Sensor	Silicon	10.1007/s12633-022-01984-1
		Numerical study of temperature and pressure effect on one dimensional random photonic crystal used as biosensors in the detection of breast cancer cells	Physica Scripta	10.1088/1402-4896/acad43

Dr.T.Ramarao	2	Well-to-Wheel Performance of Internal Combustion Engine Vehicles and Electric Vehicles	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	https://doi.org/10.1080/15567036.2023.2182844
		Optimization of strip-based hybrid plasmonic terahertz waveguide with distributed Bragg reflector layers	Optical Engineering	https://doi.org/10.1117/1.OE.62.3.037108
Dr. P. Eswaran	3	Hardware acceleration for object detection using YOLOv4 algorithm on Xilinx Zynq platform	Real-Time Image Proc	https://doi.org/10.1007/s11554-022-01234-y
		Development of an enhanced U-Net model for brain tumor segmentation with optimized architecture	Biomedical Signal Processing and Control	https://doi.org/10.1016/j.bspc.2022.104427
		Ultra-wide bandgap Al0.1Ga0.9N double channel HEMT for RF applications	Int J RF Microw Comput Aided Eng	https://doi.org/10.1002/mmce.23360
Dr.S.Dhanalakshmi	8	Fully Automatic Left Ventricle Segmentation Using Bilateral Lightweight Deep Neural Network	Life	https://doi.org/10.3390/life13010124
		An Overview of Deep Learning Methods for Left Ventricle Segmentation	Computational Intelligence and Neuroscience	https://doi.org/10.1155/2023/4208231
		Conventional machine learning and deep learning in Alzheimer's disease diagnosis using neuroimaging: A review	Frontiers in Computational Neuroscience	10.3389/fncom.2023.1038636
		Soft Attention Based DenseNet Model for Parkinsons Disease Classification Using SPECT Images	Front Aging Neurosci	10.3389/fnagi.2022.908143
		Automated restricted Boltzmann machine classifier for early diagnosis of Parkinsonâ€™s disease using digitized spiral drawings	Journal of Ambient Intelligence and Humanized Computing	https://doi.org/10.1007/s12652-022-04361-3

		Comparative studies of deep learning segmentation models for left ventricle segmentation	Front Public Health	https://doi.org/10.3389/fpubh.2022.981019
		An effective deep learning pipeline for improved question classification into blooms taxonomy domain	Education and Information Technologies	https://doi.org/10.1007/s10639-022-11356-2
		A case study on the effect of light and colors in the built environment on autistic children's behavior	Frontiers in Psychiatry	https://doi.org/10.3389/fpsyt.2022.1042641
Dr. P. Vijayakumar	3	Classification of Organic and Conventional Vegetables Using Machine Learning: A Case Study of Brinjal, Chili and Tomato	Foods	https://doi.org/10.3390/foods12061168
		Artificial Intelligence (AI) Powered Precise Classification of Recuperation Exercises for Musculoskeletal Disorders	Traitement du Signal	https://doi.org/10.18280/ts.400237"
		Detection of Diabetic Retinopathy from Retinal Images Using DenseNet Models	Computer Systems Science and Engineering	https://doi.org/10.32604/csse.2023.028703
Dr. C. T. Manimegalai	2	High-speed VLC Security System Using Two Key Services by Multi-point Analysis	IETE Journal of Research	https://doi.org/10.1080/03772063.2023.2176366
		Design of matched filter for signal-to-noise ratio maximization to improve data rate	Microwave and Optical Technology Letters	http://doi.org/10.1002/mop.33522
Dr. K. Kalimuthu	4	Correlation and contrast of multi-user edge computation with single-user edge computation for data offload on terrain electric vehicular applications	Multimedia Systems and Applications	https://doi.org/10.1007/s11042-023-
		Integrated analysis of power and performance for cutting edge Internet of Things microprocessor architectures	Microprocessors and Microsystems	10.1016/j.micpro.2023.104815

		Knowledge Discovery of Edge Computation for Ofload Vehicular Applications in IoT	Wireless Personal Communications	https://link.springer.com/article/10.1007/s11277-021-09191-8
		CNC Synthesis from Cellulose Macromolecule and Fabrication of PVA/TiO2/CNC Bio-Nanocomposite Thin Film for Biomedical Applications	ECS Journal of Solid State Science and Technology	10.1149/2162-8777/acacc6
Dr. T. Deepa	3	Hybrid Transform Based Compressive Sensing of Image with Better Quality Using Denoising Convolution Neural Network	Wireless Personal Communications	https://doi.org/10.1007/s11277-022-09971-w
		Design of Energy Efficient Multiplier with Approximate Computing on Scalable Compressor for Error-Resilient Image Contrast Enhancement	Wireless Personal Communications	https://doi.org/10.1007/s11277-022-09907-4
		A novel framework approach for intrusion detection based on improved critical feature selection in Internet of Things networks	Concurrency and Computation: Practice and Experience	https://doi.org/10.1002/cpe.7445
Dr. T. Rajalakshmi	4	Facial Emotion Detection Of Thermal And Digital Images Based On Machine Learning Techniques	Biomedical Engineering: Applications, Basis and Communications	https://doi.org/10.4015/S1016237222500521
		Dexterous Identification of Carcinoma through ColoRectalCADx with Dichotomous Fusion CNN and UNet Semantic Segmentation	Computational Intelligence and Neuroscience	https://doi.org/10.1155/2022/4325412
		Automated system for classification of COVID-19 infection from lung CT images based on machine learning and deep learning techniques	Scientific reports	https://doi.org/10.1038/s41598-022-20804-5
		ColoRectal CADx : Expeditious Recognition of colorectal cancer with Integrated convolutional neural networks	Computational and Mathematical methods in Medicine	10.1155/2022/8723957

		and visual explanations using mixed dataset evidence		
Dr. J. Subhashini	1	Artificial Neural Network-Based Development of an Efficient Energy Management Strategy for Office Building.	Intelligent Automation & Soft Computing	https://doi.org/10.32604/iasc.2023.038155
Dr. R. Dayana	1	Biogas Production from Food Waste using Nanocatalyst,	Journal of Nanomaterials	10.1155/2022/7529036
Dr .A. Maria Jossy	1	A hybrid deep learning approach for detection and segmentation of ovarian tumours	Neural Computing & Applications	https://doi.org/10.1007/s00521-023-08569-y
Dr.S. Latha	1	Discernment on assistive technology for the care and support requirements of older adults and differently-abled individuals	Frontiers in Public Health	10.3389/fpubh.2022.1030656
Mrs. M. Valarmathi	1	Design and Simulation of Physical Layer Security for Next Generation Intelligent Optical Networks	Wireless Personal Communications	https://doi.org/10.1007/s11277-022-09913-6
Dr. M. Neelaveni Ammal	1	Metamaterial inspired Square gap defected ground structured wideband dielectric resonator antenna for Microwave applications	Heliyon	https://doi.org/10.1016/j.heliyon.2023.e13564
Ms. T. Ramya	1	An Optimum Probabilistic Shaping Based Uplink SCMA Codebook Design using Hybrid Firefly-Bat Algorithm	Wireless Personal Communications	https://doi.org/10.1007/s11277-023-10297-4
Dr. V. Sarada	1	Generic image application using GANs (Generative Adversarial Networks): A Review	Evolving Systems	https://link.springer.com/article/10.1007/s12530-022-09464-y
Dr. E. Chitra	1	Using Transfer Learning for Automatic Detection of COVID-19 from Chest X-ray Images	Advances in Science and Technology	https://doi.org/10.4028/p-4zt8lr

Dr. S. Kayalvizhi	1	Prediction of ground water quality in western regions of Tamil Nadu using deep auto encoders	Urban Climate	https://doi.org/10.1016/j.uclim.2023.101458
Mrs. S. Kolangiammal	2	A Compact Planar Monopole UWB MIMO Antenna for Short Range Indoor Applications	sensors	https://doi.org/10.3390/s23094225
		Design of Compact Planar Monopole UWB MIMO Antenna with Four Orthogonal Elements and Tapered Fed Configuration for Wireless Diversity Applications	Electronics	https://doi.org/10.3390/electronics11193087
Dr. B. Priyalakshmi	1	Emperor Penguin Optimized Q Learning Method for Energy Efficient Opportunistic Routing in Underwater WSN	Wireless Personal Communication	https://doi.org/10.1007/s11277-022-10031-6
Mrs. P. Ponnammal	1	Miniaturized bandwidth reconfigurable microwave bandpass filter	Microelectronics International	10.1108/MI-03-2022-0032
Mr. B. Ananda Venkatesan	1	Non-Destructive Detection of Pipe Line Cracks Using Ultra Wide Band Antenna with Machine Learning Algorithm	The Applied Computational Electromagnetics Society Journal (ACES)	https://doi.org/10.13052/2022.ACES.J.371103
Mr. T. Saminathan	3	Compact multiband monopole antenna design for IoT applications	Journal of Electromagnetic Waves and Applications	https://doi.org/10.1080/09205071.2022.2163191
		Design and Analysis of Dual Narrow Band MIMO (DNB-MIMO) Antenna for IoT Applications	ACES JOURNAL	https://doi.org/10.13052/2022.ACES.J.370809
		Integrated Narrow Band (NB) and UWB MIMO Antenna for IoT Applications	IETE Journal of Research	https://doi.org/10.1080/03772063.2023.2196260

Dr. R. Prithiviraj	1	Impact of neutron induced Single-Event Multiple Transients in ADDLL based frequency multiplier	AEU-International Journal of Electronics and	https://doi.org/10.1016/j.aeue.2022.154315
Mrs.D. Vijayalakshmi	1	Photonic crystal fber-based biosensor for detection of women reproductive hormones	Optical and Quantum Electronics	https://link.springer.com/article/10.1007/s11082-023-04672-5
Mrs. S. Hannah Pauline	3	A robust low-cost adaptive filtering technique for phonocardiogram signal denoising	Signal Processing	https://doi.org/10.1016/j.sigpro.2022.108688
		A low-cost automatic switched adaptive filtering technique for denoising impaired speech signals	Multidimensional systems and signal processing	https://doi.org/10.1007/s11045-022-00849-5
		Multistage Switched Adaptive Filtering Approach for Denoising Speech Signals of Parkinson	Circuits Syst Signal Process	https://doi.org/10.1007/s00034-022-02211-3
Mrs. A. Ramya	1	Novel Apodized Fiber Bragg Grating applied for Medical Sensors: Performance Investigation	Computer Modeling in Engineering & Sciences	https://doi.org/10.32604/cmes.2022.022144
Mrs. S. Suhasini	3	Ultralow thermal conductivity performance of Selenium based tetradymites via solvothermal assisted annealing method	Ceramics International	10.1016/j.ceramint.2022.09.088
		Ultra-high thermopower of 3D network architectures of ZnO nanosheet and porous ZnO nanosheet coated carbon fabric for wearable multi-applications	Ceramics International	10.1016/j.ceramint.2022.04.037
		Pertinence of textile-based energy harvesting system for biomedical applications	Journal of Nanomaterials	10.1155/2022/7921479
Mrs. A. Bhavani	1	Cryptographic Algorithm for Enhancing Data Security in Wireless IoT Sensor Networks	Intelligent Automation and Soft Computing	https://doi.org/10.32604/iasc.2023.029397

Mrs.A.Jaba Deva Krupa	2	A comprehensive survey on signal processing and machine learning techniques for non-invasive fetal ECG extraction.	Multimed Tools	https://doi.org/10.1007/s11042-022-13391-0
		An IoMT enabled deep learning framework for automatic detection of fetal QRS: A solution to remote prenatal care	Journal of King Saud University-Computer and Information Sciences.	https://doi.org/10.1016/j.jksuci.2022.07.002
Mrs.R.Monika	1	An efficient medical image compression technique for telemedicine systems	Biomedical Signal Processing and Control	https://doi.org/10.1016/j.bspc.2022.104404.
Dr.P.Prabhu	2	Analysis of integrated UWB MIMO and CR antenna system using transmission line model with functional verification	Scientific Reports	https://doi.org/10.1038/s41598-022-17550-z
		Koch fractal loaded high gain Super-wideband diversity THz MIMO antenna for vehicular communication	Opt Quant Electron	https://doi.org/10.1007/s11082-022-04103-x
Mrs.S.S.Gayathri	1	A Novel and Efficient Square Root Computation Quantum Circuit for Floating-Point Standard	International Journal of Theoretical Physics	https://doi.org/10.1007/s10773-022-05222-7
Dr. Sandeep Kumar P	8	Low specific absorption rate quad-port multiple-input-multiple-output limber antenna integrated with flexible frequency selective surface for WBAN applications	Flexible and Printed Electronics - 2	10.1088/2058-8585/acc25c
		Low profile multi-polarization diversity UWB antenna for body centric communications	International Journal of Microwave and Wireless Technologies	10.1017/S1759078722000824
		Quad-Port Electromagnetic Band Gap (EBG)"Backed Non-Isomorphic Multiple-Input-Multiple-Output (MIMO) Antenna for Wearable Applications	Flexible and Printed Electronics	10.1088/2058-8585/ac8e7c

		On the Design and Performance Analysis of Flexible Planar Monopole Ultra-Wideband Antennas for Wearable Wireless Applications	International Journal of Antennas and Propagation	10.1155/2022/5049173
		A Novel Low-Profile 5G MIMO Antenna for Vehicular Communication	International Journal of Antennas and Propagation	https://doi.org/10.1155/2022/9431221
		Design and Analysis of a Flexible Smart Apparel MIMO Antenna for Bio-Healthcare Applications	Micromachines	https://doi.org/10.3390/ mi13111919
		Design and Analysis of a Dual-Band Semitransparent MIMO Antenna for Automotive Applications	• International Journal of Antennas and Propagation	https://doi.org/10.1155/2022/2146084
		Design and Analysis of UWB MIMO Antenna for Smart Fabric Communications	International Journal of Antennas and Propagation	https://doi.org/10.1155/2022/5307430
Dr. Kanaparthi V Phani Kumar	3	Design of High Selectivity Compact Dual Band Bandpass Filter With Seven Transmission Zeros for GPS and WiMAX Applications	IEEE Transactions on Circuits and Systems II: Express Briefs	10.1109/TCSII.2023.3238792
		A Compact Ultra-Wideband Multi-Mode Bandpass Filter With Sharp-Rejection Using Stepped Impedance Open Stub and Series Transformers	IEEE Transactions on Circuits and Systems II: Express Briefs	10.1109/TCSII.2022.3192512
		A miniaturized dual-band bandpass filter with sharp roll-off rate using coupled lines and dual transmission lines.	AEU-International Journal of Electronics and Communications	10.1016/j.aeue.2022.154367
Dr. Damodar Panigrahy	1	Impact of truncation on absorption spectra in a graphene-based random photonic crystal	Emerging Materials Research	https://www.icevirtuallibrary.com/doi/abs/10.1680/jemmr.22.00087

Dr.Soumyaranjan Routray	6	Determinants Affecting the Performance of CZTSSe: Antisite Defects and Multiple Quantum Confinement for Photon-Sensitive Devices	IEEE Sensors Journal	10.1109/JSEN.2022.3190226.
		Performance limitation of Cu2FeSnS4 solar cell: Understanding impact of density of defect states	Optical Materials	https://doi.org/10.1016/j.optmat.2022.112885
		Understanding Performance Limitation of Cu2CdSnS4 as Photoactive Layer: Physics of Defect States and Recombination Mechanisms	IEEE Sensors Journal	10.1109/JSEN.2022.3205661
		Retrieving Carrier Population and Collection Efficiency in CFTS/CFTSe-Based Solar Cell Using Low-Dimensional Multiple Nanostructures	Phys. Status Solidi A	https://doi.org/10.1002/pssa.202200567
		"Diversity Analysis of Defect Distribution and Carriers Quantization in Cu2ZnSnS4/Cu2ZnSn(S,Se)4 Kesterite Quantum Well Solar Cell"	ECS Journal of Solid State Science and Technology	10.1149/2162-8777/acd1b0
		Analysis of opto-electrical, trap complexity and defect density in Cu,Zn,Ge,S/Se kesterite thin-film solar cell	Optical Materials	https://doi.org/10.1016/j.optmat.2022.112975
Dr. S. Murugaveni	1	Layering of edge node for jamming attack detection and elimination in wireless sensor network	Concurrency Computation Practice and Experience	https://doi.org/10.1002/cpe.7737
Dr. S. Umamaheswari	1	Heat transfer capacity in millimeter size breast cancer cells analysis through thermal imaging and FDNCNN for primary stage identification	Biomedical signal Processing and control	https://doi.org/10.1016/j.bspc.2022.104361

Dr. Sachin Kumar	14	Frequency Reconfigurable Quad-Element MIMO Antenna with Improved Isolation for 5G Systems	Electronics	10.3390/ electronics12040796
		An efficient wideband cascode class FF-1 Doherty power amplifier with control harmonic impedance inverter for X-band applications	International Journal of Circuit Theory and Applications	10.1002/cta.3581
		Design and analysis of a serrate-shaped fractal photoconductive antenna for terahertz applications	Optical and Quantum Electronics	10.1007/s11082-023-04745-5
		Pattern Diversity and Isolation Enhancement of UWB MIMO Antenna Based on Characteristic Modes for Mobile Terminals	International Journal of Microwave and Wireless Technologies	10.1017/S1759078722000757
		Compact Circularly Polarized Cross Dipole Antenna for RFID Handheld Readers/IoT Applications	International Journal of Electronics and Communications	10.1016/j.aeue.2022.154343
		Dual-Band Circularly-Polarized EBG-Based Antenna for Wi-MAX/WLAN/ISM Band Applications	Wireless Personal Communications	10.1007/s11277-022-09951-0
		Performance Analysis of Slotted Rectangular Photonic Crystal Fiber Structures in Terahertz Waveguidance	Optical Engineering	10.1117/1.OE.61.9.096104
		Quad-Port UWB MIMO Footwear Antenna for Wearable Applications	IEEE Transactions on Antennas and Propagation	10.1109/TAP.2022.3177481
		Electrically Small Circularly Polarized UWB Intraocular Antenna System for Retinal Prosthesis	• IEEE Transactions on Biomedical Engineering	10.1109/TBME.2022.3171842
		Design of an RF Output Class JJ-1 Doherty Power Amplifier Using Post-	International Journal of Circuit Theory and Application	10.1002/cta.3507

		Matching Varactor Diodes for Configurable IoT Transmitters		
		Compact Dual Circularly-Polarized Quad-Element MIMO/Diversity Antenna for Sub-6 GHz Communication Systems	• Sensors	10.3390/s22249827
		A Car Logo Design-Inspired CPW-Fed Semitransparent Antenna for Vehicular Applications	International Journal of Antennas and Propagation	10.1155/2023/7101049
		Design and Development of a Triple-Band Multiple-Input–Multiple-Output Antenna for Sensing Applications	Micromachines	10.3390/mi13122240
		Design and Analysis of a Dual-Band Semitransparent MIMO Antenna for Automotive Applications	• International Journal of Antennas and Propagation	https://doi.org/10.1155/2022/2146084
Mr. Harish Chandra Kumawat	1	Development of RF-Photonic System for Automatic Targets' Nonlinear Rotational/Flapping/Gliding Signatures Imaging Applications	Journal of Circuits, Systems and Computers	https://doi.org/10.1142/S0218126623501311
Dr. Arijit Bardhan Roy	1	Cross-fertilized biomimetic structures achieved through nanosphere lithography on an ultrathin wafer for flexible black c-Si SHJ solar cells	Materials Today Chemistry	https://doi.org/10.1016/j.mtchem.2023.101446
Dr. Manish Verma	4	TOPcon route with quantum wells in GaInP/Si dual junction cell for efficiency enhancement	Solar Energy	https://doi.org/10.1016/j.solener.2022.12.053.
		Analytical Model of InP QWs for Efficiency Improvement in GaInP/Si Dual Junction Solar Cell	physica status solidi (a) - applications and materials science	https://doi.org/10.1002/pssa.202200500
		CuO Film as a Recombination Blocking Layer: a Unique Approach for the Efficiency Improvement of Si Solar Cells	Silicon	https://doi.org/10.1007/s12633-023-02331-8

		Bandgap engineered 1.48 eV GaAs0.95P0.05 solar cell with enhanced efficiency using double BSF layer	Advances in Natural Sciences: Nanoscience and Nanotechnology	10.1088/2043-6262/acc736