

SRM Institute of Science and Technology				
College of Engineering and Technology				
Department of Electronics and Communication Engineering				
Academic Year 2023-2024				
Scientific Citation Indexed Publications				
Name of the Author	Count	Title of paper	Name of journal	DOI
Dr. Shanthi Prince	3	Performance analysis of a hybrid FSO/mmWave/THz system for short-range communication under rain and fog conditions	Physica Scripta	https://doi.org/10.1088/1402-4896/acfc82
		Photonic integrated cmos-compatible true time delay based broadband beamformer	Optical and Quantum Electronics	https://doi.org/10.1007/s11082-023-05492-3
		Localizing an underwater sensor node using sonar and establishing underwater wireless optical communication for data transfer applications	Marine Georesources and Geotechnology	https://doi.org/10.1080/1064119X.2023.2216196
Dr. B. Ramachandran	1	Imposition Recognition in Vehicular Networks using Hybrid Offloading Techniques with Improved Radial Bias Neural Network	Journal of Soft Computing	https://doi.org/10.1007/s00500-023-09122-8
Dr. S.Malarvizhi	2	Real-time deployment of BI-RADS breast cancer classifier using deep learning and FPGA techniques	Journal of Real-time Image Processing	https://link.springer.com/article/10.1007/s11554-023-01335-2
		Hardware deployment of deep learning model for classification of breast carcinoma from digital mammogram images	Medical & Biological Engineering & Computing	https://link.springer.com/article/10.1007/s11517-023-02883-2
Dr. T. Ramarao	3	Graphene based waveguide fed hybrid plasmonic terahertz patch antenna	Frequenz	https://doi.org/10.1515/freq-2023-0070

		Graphene based Quad Port Terahertz MIMO Antenna for Wireless Indoor Communications	Optical & Quantum Electronics	https://doi.org/10.1007/s11082-023-05050-x
		QoS Improving Downlink Scheduling Scheme for Slicing in 5G Radio Access Network (RAN)	IEEE Transactions on Vehicular Technology	10.1109/TVT.2023.3327874
Dr. J. Selvakumar	1	Circuit fault Detection using multiclass Support vector machine	International Journal of Electronics	https://doi.org/10.1080/00207217.2023.2267219
Dr. S. Dhanalakshmi	3	A review of emergent intelligent systems for the detection of Parkinson's disease	Biomedical Engineering Letters	https://doi.org/10.1007/s13534-023-00319-2
		Design and Implementation of Tilted FBG for Concurrent Temperature and Humidity Measurement using Machine Learning	Optical Fiber Technology	https://doi.org/10.1016/j.yofte.2023.103630
		Speech features-based Parkinson's disease classification using combined SMOTE-ENN and binary machine learning	Health and Technology	https://doi.org/10.1007/s12553-023-00810-x
Dr. P. Vijayakumar	3	Hierarchical Decoding Mechanism for Interference Cancellation in Full-Duplex Intelligent Reflecting Surfaces Aided Non-Orthogonal Multiple Access System	IEEE ACCESS	10.1109/ACCESS.2023.3295908
		Optimal ElGamal Encryption with Hybrid Deep-Learning-Based Classification on Secure Internet of Things Environment	Sensors	https://doi.org/10.3390/s23125596
		Real-time AI-assisted visual exercise pose correctness during rehabilitation training for musculoskeletal disorder	Journal of Real-Time Image Processing	https://link.springer.com/article/10.1007/s11554-023-01385-6

Dr. J. Manjula	2	Experimental Verification of Microwave Head Imaging System Using Phantoms Fabricated from Artificial Tissue Mimicking Materials	Journal of Electronic Materials	https://link.springer.com/article/10.1007/s11664-023-10756-5
		Dielectric Characterization of Dispersive Head Tissue for Detection and Classification of Tumour Using Microwave Imaging Technique and Deep Learning Model	Arabian Journal for Science and engineering	https://link.springer.com/article/10.1007/s13369-023-08666-z
Dr. M. S. Vasanthi	2	Dynamic spectrum access-based augmenting coverage in narrow band Internet of Things	International Journal of Communication Systems	https://doi.org/10.1002/dac.5629
		Chamfered edge filtering ultra-wideband antenna integrated with H-unit cell-loaded feed line for improved out-of-band rejection	International Journal of Microwave and Wireless Technologies	https://doi.org/10.1017/S1759078723000636
Dr. T. Deepa	2	On the performance of delta sigma modulators for DCO-OFDM based NOMA visible light communication systems	Optics and Laser Technology	https://doi.org/10.1016/j.optlastec.2023.109653
		An Ensemble Intrusion Detection System based on Acute Feature Selection	Multimedia Tools and Applications	https://doi.org/10.1007/s11042-023-15788-x
Dr. T. Rajalakshmi	1	An advanced diagnostic ColoRectalCADx utilises CNN and unsupervised visual explanations to discover malignancies	Neural Computing and Applications	10.1007/s00521-023-08859-5
Dr. J. Subhashini	1	Optimizing Power Consumption in Different Climate Zones Through Smart Energy Management: A Smart Grid Approach	Wireless Personal Communications	https://link.springer.com/article/10.1007/s11277-023-10591-1

Dr. R. Dayana	2	Improving Object Detectors by Exploiting Bounding Boxes for Augmentation Design	IEEE Access	10.1109/ACCESS.2023.3320638.
		Valorization of food waste into biofertilizer and enhancement of anaerobic digestion process using nanocatalyst	Biomass Conversion and Biorefinery	https://doi.org/10.1007/s13399-023-05062-3
Dr. K. Vijayan	1	Optimizing IoT-enabled WSN routing strategies using whale optimization-driven multi-criterion correlation approach employs the reinforcement learning	Optical and quantum electronics	https://doi.org/10.1007/s11082-023-06269-4
Dr. Rajesh Agarwal	3	Characterization and modeling of threshold voltage for organic and amorphous thin-film transistors	Microelectronics Reliability	10.1016/j.microrel.2023.115054
		Gate dielectric based steady state & transient analysis of channel characteristics for organic thin-film transistors	J Mater Sci: Mater Electron	https://doi.org/10.1007/s10854-023-11580-7
		Threshold Voltage Extraction Using Conductance–Voltage Method for Nano-Organic/Oxide Thin-Film Transistors: Comparative Study of P- and N-Type Devices	Physica Status Solidi A	https://doi.org/10.1002/pssa.202300746
Dr. P. Radhika	2	Design and Analysis of PVT Tolerant Hybrid Current Starved Ring VCO with Bulk Driven Keeper Technique at 45 nm CMOS Technology for the PLL Application	AEU - International Journal of Electronics and Communications	https://doi.org/10.1016/j.aeue.2023.154987

		A high-speed MCML charge pump design at 10 GHz frequency in 45 nm CMOS technology for PLL application	Analog Integrated Circuits and Signal Processing	https://doi.org/10.1007/s10470-023-02225-0
Dr. M.K. Srilekha	1	Human Fatty Liver Volume Measurement Device using Nano Graphene Polyvinyl Sensor	IEEE sensors journal	10.1109/JSEN.2023.3308769
Dr.E. Elamaran	1	A novel approach of low complexity distributed UA algorithm is used for traffic load balancing and interference in next generation networks	Optical and Quantum Electronics	https://doi.org/10.1007/s11082-023-06105-9
Dr. R. Prithiviraj	1	Low power 10T phase and frequency detector for high frequency phase locked loop	International Journal of Numerical Modelling: Electronic Networks, Devices and Fields	https://doi.org/10.1002/jnm.3131
Mrs. R. Monika	1	An optimal adaptive reweighted sampling-based adaptive block compressed sensing for underwater image compression	The visual computer	https://doi.org/10.1007/s00371-023-03069-5
Dr. Sandeep Kuamr Palaniswamy	3	On the Experimental Investigation of Bone Fracture Recovery Process Using an Ultra-Wideband Planar Monopole Antenna	International Journal of Antennas and Propagation	https://doi.org/10.1155/2023/8825446
		Quad-port multiservice integrated optically transparent automotive antenna for vehicular classification applications	Scientific Reports	10.1038/s41598-023-44475-y

		Compound reconfigurable symmetric slotted MIMO antenna with ABS enclosure for indoor wireless applications	AEU - International Journal of Electronics and Communications	doi.org/10.1016/j.aeue.2023.155059
Dr. Kanaparthi V Phani Kumar	1	A Compact Textile Monopole Antenna for Monitoring the Healing of Bone Fractures Using Un-Supervised Machine Learning Algorithm	IEEE Access	10.1109/ACCESS.2023.3314577
Dr. Damodar Panigrahy	4	Super-broadband terahertz absorber: an optimized and magnetized graphene-embedded 1D disordered photonic system	Journal of the Optical Society of America B: Optical Physics	https://doi.org/10.1364/JOSAB.493019
		Design and Analysis of a Conformal MIMO Ingestible Bolus Sensor Antenna for Wireless Capsule Endoscopy for Animal Husbandry	IEEE Sensors Journal	10.1109/JSEN.2023.3323658
		Completely switchable multi-mode narrowband terahertz absorber: Monolayer graphene, coupled topological interface states, and Rabi splitting	Journal of Applied Physics	https://doi.org/10.1063/5.0173081
		Simultaneous feeder reconfiguration, DSTATCOM allocation, and sizing using seagull optimization algorithm in unbalanced radial distribution systems	Soft Computing	https://doi.org/10.1007/s00500-023-09472-3

Dr. Soumyaranjan Routray	3	Analytical Modeling and Optimization of Cu ₂ ZnSn(S,Se) ₄ Solar Cells with the Use of Quantum Wells under the Radiative Limit	NANOMATERIALS	https://doi.org/10.3390/nano13142058
		Environmentally Benign Nanostructured Kesterite Binate Quantum Dot Well (BQDW) Solar Cell: A Proposal Towards High Efficiency	IEEE Transactions on Nanotechnology	https://doi.org/10.1109/TNANO.2023.3306546
		Nanostructure Based CZGS/CZGSe Multiple Quantum Wells Could Sense Wider Solar Spectrum To Enhance Light-harvesting Efficiency	IEEE Sensor Journal	https://doi.org/10.1109/JSEN.2023.3287595
Dr. C. Vimala	2	Intelligent optimization-based pulmonary emphysema detection with adaptive multi-scale dilation assisted residual network with Bi-LSTM layer	Biomedical Signal Processing and Control	10.1016/j.bspc.2023.105643
		An automatic multi-class lung disease classification using deep learning based bidirectional long short term memory with spiking neural network	Multimedia Tools and Applications	https://doi.org/10.1007/s11042-023-17371-w
Dr. Sounik Kiran Kumar Dash	2	A Cutting-Edge S/C/X Band Antenna for 5G and Beyond Application	AIP Advances	https://doi.org/10.1063/5.0177355
		5G millimeter-wave MIMO DRAs with reduced mutual coupling	Microwave and Optical Technology Letters	10.1002/mop.33982

Dr.Sachin Kumar	13	Design of a Common-Mode Rejection Filter Using Dumbbell-Shaped Defected Ground Structures Based on Equivalent Circuit Models	Electronics	10.3390/electronics12153230
		Design and Implementation of a Planar MIMO Antenna for Spectrum-Sensing Applications	Electronics	10.3390/electronics12153311
		Far-Field Wireless Power Transmission and Measurement for a Leadless Transcatheter Pacing System	IEEE Transactions on Instrumentation and Measurement	10.1109/TIM.2023.3302377
		Versatility Investigation of Grown Titanium Dioxide Nanoparticles and Their Comparative Charge Storage for Memristor Devices	Micromachines	10.3390/mi14081616
		Dual-Band MIMO Antenna Data Telemetry for Dual-Chamber Leadless Cardiac Pacing on Internet of Things Environment	IEEE Internet of Things Journal	10.1109/JIOT.2023.3321903
		On Autonomous Phase Balancing of the Coplanar Stripline as a Feedline for a Quasi-Yagi Antenna	Electronics	10.3390/electronics12194168
		The role of delay in vaccination rate on Covid-19	Heliyon	10.1016/j.heliyon.2023.e20688
		A Contact-Less Electrically Small Antenna Sensor for Retinal Cancer Cell Detection	International Journal of Antennas and Propagation	10.1155/2023/5516412

		Decoupling Methods in Planar Ultra-Wideband Multiple-Input-Multiple-Output Antennas: A Review of the Design, State-of-the-Art, and Research Challenges	Electronics	10.3390/electronics12183813
		Low-loss MIMO antenna wireless communication system for 5G cardiac pacemakers	Scientific Reports	10.1038/s41598-023-36209-x
		Gabor Filter and Centre Symmetric-Local Binary Pattern based technique for forgery detection in images	Multimedia Tools and Applications	10.1007/s11042-023-17485-1
		GPS-Integrated RFID Antenna With AMC Backing for IoT-Based Sensing and Tracking Applications	IEEE Transactions on Antennas and Propagation	10.1109/TAP.2023.3332481
		Design and Measurement of a Thirty-Two-Port MIMO/Diversity Antenna Based on Radiator-Ground Isomorphic Inverse Approach for Intelligent Vehicular Internet of Things Communications	Vehicular Communications	10.1016/j.vehcom.2023.100697
Dr. Manish. Verma	2	Optimization of a-Si Thin Film Solar Cell performance with passivation and c-Si cap layer	Phys. Status Solidi A, applications and material science	10.1002/pssa.202300213
		GaAs _{0.95} P _{0.05} single junction solar cell with InP QW in p-i-n region for sub-bandgap photon absorption	Physica scripta	10.1088/1402-4896/acdccc4

Dr. Aditya Nath Bhatt	1	Enhancing Photomultiplication in Organic Photodetectors with Two-Dimensional Metal–Organic Framework Nanosheets	ACS Applied Electronic Materials	https://doi.org/10.1021/acsaelm.3c01237
A. Manikandan	1	Performance Evaluation of VANET using Directional Location Aided Routing (D-LAR) Protocol with Sleep Scheduling Algorithm	Ain Shams Engineering Journal	https://doi.org/10.1016/j.asej.2023.102458