

VRSEC : ECE
Faculty Publications

International Journals:34 (SCI: 28, Scopus:05, ESCI-01)

S.No.	Name of Faculty	Name of Co-authors	Title of paper	Name of Journal	Date and year of publication	Volume, Issue, Page No.	ISSN Number	DOI of Publication (if not published yet mention NIL)	Indexing (Scopus/SCI/ESC I/UGC/Others)	Quartile Factor of the Journal	Impact Factor
1.	Dr.Pratikhya Raut	Deepak Kumar Panda	Threshold voltage model development of N+ pocket vertical junctionless TFET (V-JL-TFET) as a label free biosensor	Microelectronics Journal	July 4 2024	151, 106331	1879-2391	https://doi.org/10.1016/j.mejo.2024.106331	SCI	Q3	1.9
2.	Dr.Pratikhya Raut	Nelaturi Nagendra Reddy, Deepak Kumar Panda	Low-bandgap Material Engineering based TFET device for Next-Generation Biosensor	Micro and Nanostructures	23-07-2024	19,42,07 ,935	2773-0123	https://doi.org/10.1016/j.micrna.2024.207935	SCI	Q2	3.1

			Application-A Comprehensive review on Device structure and Sensitivity								
3.	Dr.Pratikhy a Raut	Vydha Pradeep Kumar, Deepak Kumar Panda, Ahmed Nabih Zaki Rashed	Exploring Next-Generation TMDC Materials: A Comprehensive Review of Their Classifications, Properties, and Applications	<u>Silicon</u>	08-03-2025		1876-9918	https://doi.org/10.1007/s12633-025-03274-y	SCI	Q2	2.8
4.	Dr.Pratikhy a Raut	Deepak Kumar Panda, Ahmed Nabih Zaki Rashed	Analysis of Dual Material Gate InSb/Si Heterojunction Silicon on Insulator Tunnel Field Effect Transistor (DMG-HJ-	<u>Sensing and Imaging</u>	01-03-2025	Vol-26,pg no 25	1557-2072	https://doi.org/10.1007/s12220-025-00558-w	SCI	Q2	1.5

			SOI-TFET) Biosensor for CREB-2 Protein Detection								
5.	Dr M Padmaja	Kondaiah M.	Development of hybrid sewing training- based dingo optimization algorithm for massive MIMO spectral efficiency maximization system	Australian Journal of Electrical and Electronic s Engineeri ng,	Aug- 24	nil	2380603	https://doi.org/10.1080/1448837X.2024.4	Taylor & Francis, SCOPUS	Q3	
6.	Dr. A Vijayasank ar	Fayaz Ahmed Sk	Spectral efficiency enhancement and energy optimization in 5G	Internatio nal Journal of Informatio n Technolog y	Oct 2024			10.1007/s41 870-024- 02209-x	Springer	Q2	

7.	Dr. K. Shri Ramtej	Vijaya Durga Chintala, Subba Rao Suddapalli, Anuradha Sundru	An enhanced companding algorithm for universal filtered multicarrier system	ETRI	18-09-2024	vol. 47, no. 2, pp. 244-255	2233-7326	https://doi.org/10.4218/etrj.2023-0516	SCI	Q2	1.3
8.	Dr. K. Shri Ramtej	Neel Kanth Kundu, Amit Ghanshyala	Quantum Communication in Weakly Turbulent Channels: Error Analysis and Capacity Bounds	IEEE Wireless Communications Letters	23-10-2024	vol. 13, no. 12, pp. 3658-3662	2162-2345	https://doi.org/10.1109/LWC.2024.3485533	SCI	Q1	4.6
9.	Prasad, K. V.,	T. Haritha, V. S. D. Rekha, B. Alekhya, and V. Saritha.	"Isolation Improvement of UWB-MIMO Design Using Elliptical Stub."	IETE Journal of Research	05-09-2024		<u>0377-2063</u>	https://doi.org/10.1080/03772063.2024.2395459	SCI	Q3	1.5
10.	Prasad, K. V,	Venkata Siva Prasad Makkapati.	"Investigation of Slotted Ground and M-Shaped DGS in Enhancing	Wireless Personal Communications	2024	vol 136,no 4 pp 2027-2045	1572-834X	https://doi.org/10.1007/s11277-024-11016-1	SCI	Q3	1.9

			MIMO Antenna Isolation."								
11.	Dr K B S Sri Nagini	Chandu D.S, Ping Jack Soh, S.S. Karthikeyan	Highly sensitive dual-functional all-dielectric biosensor for hemoglobin and cancer detection	AEU - International Journal of Electronics and Communications	sep 2nd 2024	187, 155504	<u>1434-8411</u>	https://doi.org/10.1016/j.aue.2024.155504	SCI	Q1	3.169
12.	Dr G Kishore Kumar	Naga Raghuram Chinnapurapu, Kankanala Srinivas	Power and area efficient FIR filter using Radix-2r multiplier for de-noise the electrooculography (EOG) signal	Scientific Reports	2024-9-30	14, 1, 22599	2045-2322	https://doi.org/10.1038/s41598-024-73514-5	SCI	Q1	3.8
13.	Dr. P. Satyanarayana	T. Guhan, T. Ganesan, A Bhagyalakshmi, L. Pallavi,	Exploring the Impact of Pesticide Resistance in Agricultural Pest	Global nest Journal	08.10.2024	Vol. 26, Issue 9	1790-7632	https://doi.org/10.30955/gnj.05931	SCI	Q3	1.1

		Ashok Kumar Koshariya	Management								
14.	Dr. P. Satyanarayana	G. Diwakar, V. Priyanka Brahmaiah, S. Marlin, N. V. Phani Sai Kumar	Multi-objective-derived efficient energy saving in multipath routing for mobile ad hoc networks with the modified aquila–firefly heuristic strategy	Engineering Optimization	30.09.2024	Vol. 56, Issue 8	1029-0273	https://doi.org/10.1080/0305215X.2024.2399656	SCI	Q2	2.7
15.	K.Premchand	Dr.A.Jhansi Rani, Dr.K.Rama Devi	A Corrugated Edged Tapered Slot Antenna with Low Cross-Polarization and Moderate Gain for Phased Array Systems	Electromagnetics	16 Sep 2024	VOL. 44, NO. 6, 378–393	1532-527X	doi.org/10.1080/02726343.2024.2395402	SCIE	Q3	0.8

16.	K.Premchand	Dr.A.Jhansi Rani, Dr.K.Rama Devi	A corrugated edge tapered slot dual polarized MIMO antenna for phased array systems	International Journal of Electronics	17 Nov 2024		1362-3060	doi.org/10.1080/00207217.2024.2429151	SCIE	Q3	1.3
17.	Dr. Gunnam Suryanarayana	Shri Ramtej Kondamuri, Jie Yang	Learning infrared degradations for coherent visible image fusion in the undecimated dual-tree complex wavelet domain	Infrared Physics & Technology	20 October 2024	Vol. 143	1879-0275	https://doi.org/10.1016/j.infrared.2024.105596	SCIE	Q2	3.1
18.	Dr.G.L.Madhumi	M. Srinivasa Rao, M. Sailaja	An area efficient 64 point Radix-42 MDC FFT architecture for OFDM applications	Integration, the VLSI Journal	November 2024	Vol. 99 (2024) 102244	0167-9260	https://doi.org/10.1016/j.vlsi.2024.102244	SCIE	Q3	2.2

19.	S TEENA MRUDUL A	Meenakshi,R itonga,Rane	Internet of things and optimized knn based intelligent transportation system for traffic flow prediction in smart cities	Measurem ent:Sensor s	23-08- 24	35	2665- 9174	https://doi.org/10.1016/j.measen.2024.101297	SCOPUS	Q3	2.46
20.	Dr. BALL MUKUND MANI TRIPATHI	RAJU, SANTOSH, CHANDRA	Band gap modulation and stability analysis of hydrogenated and fluorinated penta-MAs2 (M = Ni, Pd, and Pt) monolayers	<u>Materials Science and Engineeri ng: B</u>	10-02- 2025	VOL- 315	118094	https://doi.org/10.1016/j.mseb.2025.118094	SCI	Q1	4
21.	Dr. V. Narasimha Nayak	Kiran Kumar Gurrala, Pratap Turimerla, Nageswara Rao	Maximizing secure communicati on in SWIPT- NOMA with SIC and CSI errors	<u>AEU- Internatio nal Journal of Electronic s and Communi cations</u>	20-02- 2025	Vol.193	1618- 0339	https://doi.org/10.1016/j.aue.2025.155740	SCI	Q2	3

22.	Dr. G. L. Madhumati	Chaitanya Jannu Manaswini Burra Sunny Dayal Vanambathina Veeraswamy Parisae Chinta Venkata Murali Krishna	Single Channel Speech Enhancement using a Complex Dual-Path Multi Axial Transformer with Frequency Prompt	<u>Circuits, Systems, and Signal Processing</u>	31st January 2025,		0278-081X / 1531-5878	https://doi.org/10.1007/s00034-025-03010-2	SCIE	Q2	1.8
23.	Dr.SK Khaleelahmed	K. Sivakrishna, G. Rajesh, N. Durgarao, Ch. Venkateswarlu	A Deep Learning With Optimization-Based Power Allocation for Network Slicing in MIMO–NOMA	<u>International journal of communication systems</u>	24.03.2025		1099-1131	https://doi.org/10.1002/dac.70062	SCIE	Q2	1.7
24.	Dr. A Ravi Raja	Kapileswar, Nellore, Jutur Naga Vishnu, Simon J.; Mathiyalake	Analytical study for I–V characteristics of solar cell panel system behavior and	<u>Journal of Optics (India)</u>	12 Feb 2025	not yet assigned	Electronic ISSN 0974-6900	10.1007/s12596-025-02476-2	ESCI and SCOPUS	Q3	1.4

		ndran A.E, Polasi, Phani Kumar	performance efficiency evaluation under the effect of environmenta l physical parameters in infrared region								
25.	Dr. Chiranjit Ghosh	-	Design and performance analysis of chirped fiber Bragg grating for 16 × 20 Gbps DWDM system	Journal of Optical Communi cations	April 2025	not yet assigned	eISSN: 2191- 6322	https://doi.org/10.1515/joc-2024-0307	Scopus	Q3	
26.	Dr. K. Nageswara Rao	Kalpana Naidu	Efficient UAV deployment and resource optimization for enhanced data rates in CDRT- NOMA	<u>Physical Communi cation</u>	25-05- 2025	71	1876- 3219	https://doi.org/10.1016/j.phycom.2025.102696	SCIE	Q2	2

27.	Dr. G Kishore Kumar	Naga Raghuram Chinnapurapu, Kankanala Srinivas	Power and area efficient FIR filter using Radix-2r multiplier for de-noise the electrooculography (EOG) signal	Scientific Reports	30-09-2024	14,1,22599		https://doi.org/10.1038/s41598-024-73514-5	SCIE	Q1	3.8
28.	Dr.V.Saritha	V N KOTESWARA RAO Devana,N. R. Dhineshbabu ,Gavalapu S.K.Gayatri Devi,Nageswara Rao Lavuri,Seepana Praveenkumar,Hala K. Abduljaleel, Ahmed Jamal Abdullah Al-Gburi	Design and Analysis of a Compact Four-Port MIMO Antenna with Enhanced Isolation for UWB Applications	International Journal of Intelligent Engineering and Systems,	April 2025	Vol.18, No.4, 2025,210-219	21853118		Scopus		

29.	Dr. Chiranjit Ghosh	-	Design and evaluation of cascaded chirped fiber Bragg gratings in high bit rate DWDM system	<u>Journal of Optics</u>	06.03.2025	not yet assigned	0974-6900	https://doi.org/10.1007/s12596-025-02670-2	ESCI	Q3	1.6
30.	Dr. K. Shri Ramtej	Shahnaz Fatima	Machine Learning in Future Wireless Communications: Innovations, Applications, and Open Challenges	Wireless Personal Communications	03 May 2025		0929-6212	https://doi.org/10.1007/s11277-025-11770-y	SCIE	Q2	1.9
31.	K Kumar Naik	Ketavath Kumar Naik, Aginiparthi Ananthasrinivas, Chirukuri Naga Phaneendra	Implementation of Wider Impedance Bandwidth with Dual-Band and L-Shape Slits on Patch Antenna for 5G Wireless	Wireless Personal Communications	14 May 2025		1572-834X	10.1007/s11277-025-11772-w	SCI	Q2	1.9

			Communications								
32.	K Kumar Naik	A Tathababu, SD SM, M S, C KS, KB Kiran, PK J, S AL, Kumar Naik Ketavath	Parameters Optimization of Compact UWB-MIMO Antenna with WLAN Band Rejection for Short Distance Wireless Communication	IETE Journal of Research	03 April 2025		0974-780X	10.1080/03772063.2025.2483933	SCI	Q3	0.829
33.	Dr. Moirangthem Santoshkumar Singh	Jeet Ghosh, Soumendu Ghosh & Abhishek Sarkhel	A compact dual-polarized triple-band antenna for implantable Biotelemetry applications	Journal of Electromagnetic Waves and Applications	25 April 2025	Not Yet Assigned	0920-5071	10.1080/09205071.2025.2493161	SCIE	Q3	1.2
34.	Dr Venkata Sainath Gupta Thadikemalla	Dr. K. Shri Ramtej, Dr Venkateshwarlu alapati, Dr K A Meerja, Dr A S Gandhi	A comparison of compressive sensing based reconstruction algorithms used for data	Earthquakes and Structures	26 June 2025	Volume 29, Issue 1, page no 17-26	2092-7614	https://doi.org/10.12989/earth.2025.29.1.017	SCIE	Q3	1.4

			loss recovery in SHM applications - Simulation and experimental demonstratio n								
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International Conferences:14

S.No.	Name of the Faculty	Name of co-authors	Name of the conference	Title of the paper	details of conference(nam e of proceedings ,place of organization, page numbers,	Dates of the conference	ISBN Number	Indexing	Name of Publisher
1	Dr.D.Venkata Rao	Shaik Riyazuddin; V. T. Venkateswarlu; Dhulipalla Venkata Rao; Madhu	INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ELECTRONICS AND	Design and implementation of low power and area efficient hybrid AHL multiplier	ICETEC, Nandyal,India,2023	15–17 April 2023		Scopus	

		Ramarakula	COMMUNICATION ENGINEERING - 2023						
2	Dr.G.L.Madhumati	-	4TH IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems (SPICES)	FPGA Implementation of Health Monitoring System for High-Risk Cardiac Patients	Indian Institute of Information Technology Kottayam, Kerala	20 - 22 September 2024	979-8-3503-7613-5	Scopus	IEEE
3	Dr K B S Sri Nagini	Chandu DS, Pooja N Kakani	21st IEEE INDICON 2024	Implementation of optically transparent flexible microwave metasurface for airplane portholes	IIT Kharagpur	19-21 December, 2024			IEEE
4	Dr K B S Sri Nagini	Dhulipalla Venkata Rao, Chandu DS, V Jaya Prakash	4th IEEE International Conference on Artificial Intelligence and Signal Processing	Highly Efficient Ultra-Wideband Reflective Cross-Polarization Converter for Ku-, K-, and Ka-band Satellite	VIT-AP University, Amaravati	26 -28 October, 2024			IEEE

			(AISP)-2024	Communication Applications					
5	Dr K B S Sri Nagini	V JayaPrakash, Chandu DS, Pooja N Kakani	3rd IEEE MAPCON 2024	Transparent and Flexible Wideband Polarization Conversion Metasurface for Aircraft Windows	Novotel HICC, Hyderabad	9-13 December, 2024			IEEE
6	Dr K B S Sri Nagini	V JayaPrakash, Chandu DS	3rd IEEE MAPCON 2024	Microfluidic Sensor Based on SIW Self-Diplexer Antenna for Simultaneous Detection of Adulteration of Different Oils	Novotel HICC, Hyderabad	9-13 December, 2024			IEEE
7	Lakshmi Sowjanya Koneru	N. Penchalaiah, B Venkatesh, Y. Suresh, Mallikharjuna Rao Nuka, J. Chinna Babu	2024 IEEE 6th International Conference on Cybernetics, Cognition and Machine Learning Applications (ICCCMLA)	IoT Intrusion Detection System for Vehicle and Emission Monitoring: Enhancing Cybersecurity in Connected Transportation	Hamburg, Germany	19-20 October 2024 Date Added to IEEE Xplore: 11 February 2025	Electronic ISBN:979-8-3315-0579-0	SCOPUS	IEEE

8	Lakshmi Sowjanya Koneru	J. Chinna Babu, Adarsh Kumar, B Venkatesh	2024 IEEE 6th International Conference on Cybernetics, Cognition and Machine Learning Applications (ICCCMLA)	Early Enhancements within IoT Technology Integration for Ecological, Security, and Economic Auditing in Underground Mines	Hamburg, Germany	19-20 October 2024 Date Added to IEEE Xplore: 11 February 2025		SCOPUS	IEEE
9	Dr.G.L.Madhupati	M. Ramya Harika; Papana Krishna Reddy; Chaitanya Jannu; Veeraswamy Parisae; Chinta Venkata Murali Krishna	4th IEEE International Conference on Artificial Intelligence and Signal Processing (AISP)-2024	Real Time Speech Enhancement Using Triple Attention U-Net	School of Electronics Engineering, VIT-AP University, Amaravati	26th -28th October 2024	2640-5768	SCOPUS	IEEE

10	Dr. A ravi Raja	Venkata Ratna Prabha K. Dasam S, Yallamandai ah S.; Usha Rani M, Pushpavathi, Aravapalli V.	Proceedings of the International Conference on Multi- Agent Systems for Collaborative Intelligence, ICMSCI 2025	Raspberry Pi: A Cost-Effective System for Real- Time Number Plate Recognition using Rear-View Cameras	Published in: 2025 International Conference on Multi-Agent Systems for Collaborative Intelligence (ICMSCI) Date of Conference: 20- 22 January 2025 Date Added to IEEE Xplore: 27 February 2025 ISBN Information: DOI: 10.1109/ICMSCI 62561.2025.1089 4189 Publisher: IEEE	20-22 January 2025	979-8- 3315- 0982-8	IEEE, Scopus	IEEE
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11	Dr. Chinnapurapu Naga Raghuram	Rahul Priyadarshi; Piyush Rawat; Tiansheng Yang; Rajkumar	The 2024 World Congress in Computer Science, Computer Engineering, & Applied Computing (CSCE'24)	Hybrid Differential Evolution Algorithm for Optimal WSN Node Deployment	The 2024 World Congress in Computer Science, Computer Engineering & Applied Computing (CSCE'24), July22-25, Las Vegas, USA. Communications in Computer and Information Science ((CCIS,volume 2254)), 27 April 2025 pp 566–575. DOI https://doi.org/10.1007/978-3-031-86637-1_42 Publisher: Springer	22-25 July	978-3-031-86636-4	Springer Cham	Springer Cham
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12	Dr. Chinnapurapu Naga Raghuram	Rahul Priyadarshi; Piyush Rawat; Tiansheng Yang; Rajkumar	The 2024 World Congress in Computer Science, Computer Engineering, & Applied Computing (CSCE'24)	Optimizing Wireless Sensor Network Node Placement Using Bacterial Foraging Optimization	The 2024 World Congress in Computer Science, Computer Engineering & Applied Computing (CSCE'24), July22-25, Las Vegas, USA. Communications in Computer and Information Science ((CCIS, volume 2254)), 27 April 2025 pp 566–575. DOI https://doi.org/10.1007/978-3-031-85923-6_14 Publisher: Springer	22-25 July	978-3-031-86636-4	Springer Cham	Springer Cham
13	Lakshmi Sowjanya Koneru	Yampalaku Pallavi, Dr. Prakash Kodali	International Conference on Computational Robotics,	A Novel Design of Power-Efficient and Accurate Approximate Multiplier using	kalasalingam Academy of Research and Education, Deemed to be	28th-30th, May 2025			IEEE

			Testing and Engineering Evaluation – ICCRTEE 2025	Approximate Compressors and Approximate Adders	University, Anand Nagar, Krishnankoil, Sri villiputtur				
14	Dr. Ravi Raja A	Venkata Ratna Prabha K. Dasam S, Yallamandai ah S.; Usha Rani M, Pushpavathi, Aravapalli V.	4th International Conference on Innovative Sustainable Computational Technologies	Raspberri-Pi A cost effective system for real time number plate recognition using rear view camers	Graphic Era University	27-12-24 to 28-12-24	Accepted and Presented	IEEE and Scopus	IEEE

Book Chapters:02

S.No.	Name of Faculty	Name of Co-Author(Mention if it is student UG/PG) and roll number	Title of Book Chapter/ Lecture series	Name of Proceedings of Conference if any/mention Nil if not from conference	Title of paper	Date & Year	Place of Organising/ Institute name if any	Indexing	Vol Number/ISBN number	Name of publisher
1	Dr.Pratikhya Raut	K. Manikanta, Umakanta Nanda, Biswajit Jena	FeFET Devices, Trends, Technology and Applications	Nil	Tunnel FET Transistors and Their Application in biosensors	11-04-2025		Scopus	NIL	Wiley
2	Dr CH Naga Raghuram	Rahul Priyadarshi1(B), Piyush Rawat, Tiansheng Yang, and Rajkumar Singh Rathore	Communications in Computer and Information Science 2260	25th International Conference, ICOMP 2024 and 22nd International Conference,	Optimizing Wireless Sensor Network Node Placement Using	July 22–25, 2024		Scopus	ISSN 1865-0929 ISSN 1865-0937 (electronic) Communications in Computer and	Springer Nature Switzerland

			ESCS 2024 Held as Part of the World Congress in Computer Science Computer Engineering and Applied Computing, CSCE 2024 Las Vegas, NV, USA, July 22–25, 2024 Revised Selected Papers	Bacterial Foraging Optimizat ion			Information Science ISBN 978-3- 031-85922-9 ISBN 978-3- 031-85923-6 (eBook) https://doi.org/ 10.1007/978- 3-031-85923-6	
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