



SETHU INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

PUBLICATIONS DETAILS

Academic Year	No. of Publication
2023-2024	17
2022-2023	9
2021-2022	14
2020-2021	15

Academic Year 2023-2024

S.No.	Name of the Faculty	Publication Details
1.	G.Soundara devi	G.Soundara devi Power electronics converters for an electric vehicle fast charging station based energy storage system and renewable energy sources: Hybrid approach https://doi.org/10.1002/oca.3066
2.	G.Soundara devi	G.Soundara devi Electric vehicle smart charging with network expansion planning using hybrid COA-CCG-DLNN approach Received: 13 November 2023 Revised: 10 January 2024 Accepted: 18 January 2024 DOI: 10.1002/oca.3108 Wiley
3.	B.Meenakshi Sundaram	B. Meenakshi Sundaram Performance Analysis of Thermal Image Processing-Based Photovoltaic Fault Detection and PV Array Reconfiguration—A Detailed Experimentation Energies 2022, 15(22), 450, https://doi.org/10.3390/en15228450
4.	P.Meenalochini	P.Meenalochini A hybrid control topology for cascaded H-bridge multilevel inverter to improve the power quality of smart grid connected system: NBO-RERNN approach CR Rajesh, P Meenalochini, SK Kannaiah, A Bindu Expert Systems with Applications 238, 122054 https://doi.org/10.1016/j.eswa.2023.122054
5.	P.Meenalochini	P.Meenalochini Energy management of grid connected PV with efficient inverter based wireless electric vehicle battery charger: A hybrid CSA-QNN technique https://doi.org/10.1016/j.est.2023.110255
6.	P.Meenalochini	P.Meenalochini Analysis of vital signs using remote Photoplethysmography https://link.springer.com/article/10.1007/s12652-023-04683-w#article-info
7.	P.Meenalochini	P.Meenalochini An Optimal Partitioning and Floor Planning for VLSI Circuit Design Based on a Hybrid Bio-Inspired Whale Optimization and Adaptive Bird Swarm Optimization (WO-ABSO) Algorithm https://doi.org/10.1142/S0218126623502730
8.	P.Meenalochini	P.Meenalochini An Efficient Control Strategy for an Extended Switched Coupled Inductor Quasi-Z-Source Inverter for 3 Φ Grid Connected System https://doi.org/10.1142/S0218126624500117
9.	P.Meenalochini	P.Meenalochini Dual-Channel Capsule Generative Adversarial Network Optimized with Golden Eagle Optimization for Pediatric Bone Age Assessment from Hand X-Ray Image https://doi.org/10.1142/S0218001423540010

10.	P.Meenalochini	P.Meenalochini Deep Convolutional Spiking Neural Network optimized with Arithmetic optimization algorithm for lung disease detection using chest X-ray images. https://doi.org/10.1016/j.bspc.2022.104197
11.	J.Jeyashanthi	Jeyashanthi J , “ANFIS based double integral sliding mode control a grid integrated hybrid power system” Optik - International Journal for Light and Electron Optics – Elsevier, https://doi.org/10.1016/j.ijleo.2022.170013 Research gate
12.	G.Narmadha	G. Narmadha Detection of Human Stress Using Optimized Feature Selection and Classification in ECG Signals Narmadha G, ¹ Deivasigamani S, ² Muthukumar Vellaisamy, ³ Lídio Inácio Freitas, ⁴ Badlishah Ahmad R, ⁵ and SakthivelB ⁶ https://doi.org/10.1155/2023/3356347 Mathematical Problem In Engineering
13.	C.Immanuvel	C.Immanuvel Third eyes’ shoes: the sight sense through smart shoes for disabled person Quantum Journal of Medical and Health Sciences 5 (eISSN: 2785-8243), 43-46.
14.	T.Harish Babu	T. Harish Babu , An early warning system for predicting Earthquake Novel Ai Application DOI: 10:4018/979-8-3693-1850-8.ch011
15.	T.Harish Babu	T.Harish Babu Analysis Of Concrete Cracks And Fatigue In Smart Cities Using Yolov3 Downloaded on February 01,2024 at 09:00:15 UTC from IEEE Xplore.
16.	S.Sugumar	S.Sugumar Comparative analysis of Hybrid, conventional and staircase static reconfiguration methods to mitigate partial shading effects: Unveiling the superiority of two-step staircase (2SS) reconfiguration. https://doi.org/10.1016/j.solener.2023.112029
17.	R.Brindha	R.Brindha Botnet attacks detection on unsw-nb 15 dataset using ae-gru hybrid autoencoder model. volume 24, issue 2, 2024 keywords— unsw-nb15, n-baiot, botnet attacks , auto-encoder, gated recurrent unit. Technische Sicherheit

Academic Year 2022-2023

S.No.	Name of the Faculty	Publication Details
1.	P.Meenalochini	R Rajagopal, R Karthick, P Meenalochini , T Kalaichelvi Deep Convolutional Spiking Neural Network optimized with Arithmetic optimization algorithm for lung disease detection using chest X-ray images Biomedical Signal Processing and Control 79, 104197, 2023
2.	P.Meenalochini	J Jasper Gnana Chandran, R Karthick, R Rajagopal, P Meenalochini Dual-Channel Capsule Generative Adversarial Network Optimized with Golden Eagle Optimization for Pediatric Bone Age Assessment from Hand X-Ray Image International Journal of Pattern Recognition and Artificial Intelligence, 2023.
3.	P.Meenalochini	R Karthick, A Senthilselvi, P Meenalochini , S Senthil Pandi An Optimal Partitioning and Floor Planning for VLSI Circuit Design Based on a Hybrid Bio-Inspired Whale Optimization and Adaptive Bird Swarm Optimization (WO-ABSO) Algorithm Journal of Circuits, Systems and Computers 32 (08), 2350273, 2023.
4.	P.Meenalochini	P Meenalochini , R Karthick, E Sakthivel An Efficient Control Strategy for an Extended Switched Coupled Inductor Quasi-Z-Source Inverter for 3 Φ Grid Connected System Journal of Circuits, Systems and Computers, 2023.
5.	P.Meenalochini	R Karthick, MS Dawood, P Meenalochini Analysis of vital signs using remote photoplethysmography (RPPG) Journal of Ambient Intelligence and Humanized Computing, 1-8, 2023.
6.	P.Meenalochini	CR Rajesh, P Meenalochini , SK Kannaiah, A BinduA Hybrid Control Topology to Cascaded H-Bridge Multilevel Inverter for Improve the Power Quality of Smart Grid Connected System: NBO-RERNN Approach Expert Systems with Applications, 122054, 2023.
7.	J.Jeyashanthi	Jeyashanthi J , Barsana Banu J, (2023) "Performance Analysis of DTC-IM Drive Using Various Control Algorithms", In chapter, Book published in Bentham Science Publishers. (https://drive.google.com/file/d/1-Zc7yfgDh90vervhyUP08au-rOUIZJiV/view)
8.	G.Narmadha	Narmadha, G. , Kumar S.A, Shanmuganantham T, Deivasigamani S,"Performance of Implantable Antenna at ISM Band characteristics for Biomedical base" ICT Express 8(2), pp. 198–201, 2022
9.	G.Narmadha	Narmadha, G., Deivasigamani, S., Balasubadra, K., Selvaraj, M. "A low power and high speed approximate adder for image processing applications" Journal of Engineering Research (Kuwait), 10(1), pp. 150–160, 2022.

Academic Year 2021-2022

S.No.	Name of the Faculty	Publication Details
1.	B.MeenakshiSundaram	B. MeenakshiSundaram L-Shape Propagated Array Configuration WitDynamic Reconfiguration Algorithm for Enhancing Energy Conversion Rate of Partial Shaded Photovoltaic Systems, IEEE Access, 2021.
2.	C.Immanuvel T.HarishBabu S.Syed Abdul Haq P.Meenalochini K.Jeyakanth	C. Immanuvel T. HarishBabu, S. Syed Abdul Haq , R. JeyaRohini , P. Meenalochini, K. Jeyakanth “A sinusoidal pulse width modulation (SPWM) technique for capacitor voltage balancing of nested I-type four-level inverter” Material Today, Volume 45, Part 2, 2021, Pages 2435-2439.
3.	G.Soundradevi	Kamalam, C.K., Rahila, J., Soundradevi, G. ”A Novel Bidirectional Electric-Drive-Reconstructed Onboard ANN Controlled Converter for Electric Vehicles” SSRG International Journal of Electrical and Electronics Engineering, 8(7), 2021.
4.	P.Meenalochini	Meenalochini, P. , Sakthivel, E. “An efficient GBDTRSO control strategy for PV connected H-Bridge Nine Level MLI System with quasi-Z-source inverter” Applied Soft Computing 113, 108026, 2021.
5.	S.Sugumar	S Sugumar , D Prince Winston, M Pravin “A novel on-time partial shading detection technique for electrical reconfiguration in solar PV system” Solar Energy, 225, pp.1009-1025, 2021.
6.	P.Meenalochini	Karthick, R., Senthilselvi, A., Meenalochini, P. , Senthil Pandi, S. “Design and Analysis of Linear Phase Finite Impulse Response Filter Using Water Strider Optimization Algorithm in FPGA” Circuits, Systems, and Signal Processing, 41(9), pp. 5254–5282, 2022.
7.	J.Jeyashanthi	Jeyashanthi J , BarsanaBanu J, (2022) “ANFIS based double integral sliding mode control a grid integrated hybrid power system” Optik - International Journal for Light and Electron Optics – Elsevier, https://doi.org/10.1016/j.ijleo.2022.170013
8.	J.Jeyashanthi	Jeyashanthi J , Barsana Banu J, M.Pandi Maharajan, M. Ramuvel, (2022) “Assessment of physical and chemical Water Quality Parameters Using Naïve Bayes Classification Algorithm”, Material Today Proceedings – Elsevier

9.	G.Narmadha	Deivasigamani, S., Narmadha, G. , Senthilpari, C., Yong, W.H., Rajesh, P.K. “Epileptic EEG signal classifications based on DT-CWT and SVM classifier” Journal of Engineering Research (Kuwait), 10(2 A), pp. 95–104, 2022.
10.	G.Narmadha	Narmadha, G. , Malathi, M., Kumar, S.A., Shanmuganatham, T., Deivasigamani, S. “Performance of implantable antenna at ISM band characteristics for biomedical base” ICT Express, 8(2), pp. 198–201, 2022.
11.	G.Narmadha	Narmadha, G. , Deivasigamani, S., Balasubadra, K., Selvaraj, M. “A low power and high speed approximate adder for image processing applications” Journal of Engineering Research (Kuwait), 10(1), pp. 150–160, 2022.
12.	S.Vijayarajan	Renethaa Desline, D.R. Vijayarajan, S. “DFO and PI Based Dual Control for Single Stage SEPIC and LLC Based PFC Converter” Journal of Electrical Engineering and Technology 17(4), pp. 2285–2298, 2022.
13.	V.Vaishnavi	Vaishnavi, V. Suveetha Dhanaselvam, P. “Neonatal cry signal prediction and classification via dense convolution neural network” Journal of Intelligent & Fuzzy Systems, vol. 42, no. 6, pp. 6103-611, 2022.
14.	J.Jeyashanthi	Barsana Banu, J., Jeyashanthi, J. , Thameem Ansari, A., Sathish, A, 2021, “Development and Implementation of the Smart Energy Monitoring System Based on IoT”, Advances in Smart Grid Technology. Lecture Notes in Electrical Engineering, 688, pp. 513–525, Springer, Singapore. https://doi.org/10.1007/978-981-15-7241-8_38 .

Academic Year 2020-2021

S.No.	Name of the Faculty	Publication Details
1.	Srinivasan B. MeenakshiSundaram	Srinivasan, S.Devakirubakaran, B. MeenakshiSundaram, “Mitigation of mismatch losses in solar PV system – Two step reconfiguration approach”, <i>Solar Energy</i> ,vol. 206, pp:640-654, June, 2020. https://doi.org/10.1016/j.solener.2020.06.004 .
2.	B.MeenakshiSundaram	B. MeenakshiSundaram Iot Based Power Monitoring System, International Journal of Computer Science and Engineering, 2021.
3.	G.Soundra Devi	A.Radhika, G.Soundra Devi, R.Mohan Kumar, “An Effective Compensation of Power Quality Issues using MPPT based Cuckoo search Optimization Approach” <i>Soft Computing,</i> Vol.24, pp:16719-16725, May 2020. https://doi.org/10.1007/s00500-020-04966-w
4.	P.Meenalochini S.Syed Abdul Haq R.Mohammed Abdullah T.HarishBabu M.Abdul Kareem	P.Meenalochini, S. Syed Abdul Haq, R.Mohammed Abdullah, T.HarishBabu, Abdul Kareem. M, R.Karthick, “A Novel Hybrid Multilevel Inverter with Switch Reduction”, International Journal of Advanced Science and Technology, Vol.29, No.4, pp.: 3018-3023, June 2020. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3633572
5.	T.Murugan	G.Dhanabalan and T.Murugan, “FPGA Design of SAR Type ADC Based Analog Input Module for Industrial Applications”, Springer, Nov 2020, https://doi.org/10.1007/978-981-15-6229-7_8
6.	P.Meenalochini, S.Syed Abdul Haq	C. Kalavalli, P. Meenalochini, P. Selvaprasanth, S. Syed Abdul Haq, “Dual Loop Control for Single Phase PWM Inverter for Distributed Generation”, <i>Materials today Proceedings,</i> 13 November 2020. https://doi.org/10.1016/j.matpr.2020.10.116
7.	P.Meenalochini	A.T.Sankara Subramanian, P.Meenalochini, S. SubaBalaSathiy, G. Ram Prakash, “A review on selection of soft magnetic materials for industrial drives”, <i>Materials Today: Proceedings,</i> Sep 18 th 2020. doi:10.1016/j.matpr.2020.08.389
8.	J.Jeyashanthi	Jeyashanthi, J., Santhi, M. “Performance of direct torque controlled induction motor drive by fuzzy logic controller” <i>Control Engineering and Applied Informatics,</i> 22(1), pp. 63–71, 2020.

9.	G.Narmadha	Narmadha G , Haarindra Prasad, Nivetha K, Raman Raguraman, Manickam.R, Deivasigamani, “Design of Phase Locked Loop (PLL) using CMOS Technology”, <i>Solid State Technology</i> , Vol.63, No.5, pp. 7501-7506, December 2020.
10.	S. Syed Abdul Haq P.Meenalochini K.Jeyakanth C.Immanuvel T.HarishBabu	S. Syed Abdul Haq, R. JeyaRohini, P. Meenalochini, K. Jeyakanth, C. Immanuvel, T. HarishBabu , “ A sinusoidal pulse width modulation (SPWM) technique for capacitor voltage balancing of nested I-type four-level inverterA sinusoidal pulse width modulation (SPWM) technique for capacitor voltage balancing of nested I-type four-level inverter”, <i>Materials Today: Proceedings</i> , 2020. https://doi.org/10.1016/j.matpr.2020.11.014
11.	C. Sonia	C. Sonia , S. Tamilselvi, C. Visvesvaran, “Improved performance of grid connected converters using PCB-embedded transformer”, <i>Materials Today: Proceedings</i> , 2020. https://doi.org/10.1016/j.matpr.2021.02.333
12.	P.Meenalochini	R.Karthick,Meenalochini P “Implementation of data cache block (DCB) in shared processor using field-programmable gate array (FPGA)”, <i>Journal of the National Science Foundation of Sri Lanka</i> , Vol.48, No.4, pp.: December, 2020.
13.	J.Jeyashanthi	Jeyashanthi J , BarsanaBanu J, (2021) “ANN-based direct torque control Scheme of an IM Drive for a wide range of speed operation”, <i>Neural Network World</i> , 2022, Vol. 31, No. 6, Pages. 395 -414.
14.	J.Jeyashanthi	Banu, J.B., Jeyashanthi, J. , Ansari, A.T, (2021),” DTC-IM drive using adaptive neuro fuzzy inference strategy with multilevel inverter, <i>Journal of ambient Intelligence and Humanized Computing</i> . https://doi.org/10.1007/s12652-021-03244-3
15.	J.Jeyashanthi	Barsana Banu J,Nammalvar P, Jeyashanthi J and Kannan V, (2021) “Implementation of Direct Current Control Strategy for PWM Rectifier Under Unbalanced Input Voltage circumstances”, <i>Annals of R.S.C.B.</i> , 2021, Vol. 25, No. 5, Pages. 1499 -1507.