

Name : Dr.S.Sumathi
Designation : Professor
Department : Electrical & Electronics Engineering,
Address : Mahendra Engineering College, Tiruchengode.
Mobile : 9443745077
E-mail : sumathis@mahendra.info

Research Publications:

S.No	Title of the Paper & Authors	Name of the Journal, Vol. No. Pages
1.	Identification of stroke diagnostic classification using machine learning	Solid State Technology. Vol.63, Issue 2s, 2020
2.	Design and Implementation of Solar Tracking System using LDR Sensor	International journal of advanced science and engineering https://doi.org/10.29294/IJASE.6.3.2020.1456-1461 vol6, No3,1456-1461, 2020
3.	Design and implementation of finger print based intelligent automated teller machine	Int. J. Adv. Sci. Eng. Vol.6 No.1 1174-1179 (2019) https://doi.org/10.29294/IJASE.6.1.2019.1174-1179
4.	Sinusoidal Pulse Width Modulation Based Speed Control of Induction Motor using Fifteen Level Diode Clamped Multilevel Inverter	International Journal of Innovative Technology and Exploring Engineering ISSN: 2278-3075, Volume-9 Issue-4, February 2020 (scopus)
5.	Early Detection Of Life Threatening Cardiac Arrhythmias Using Deep Learning Techniques, https://doi.org/10.2174/1574362414666191022145259	Current Signal Transduction Therapy,14:1,Bentham Science, 2019 (SCI , Scopus)
6.	Application of AIS on closed loop controller design in buck converter	International Journal of Recent Technology and Engineering, Vol4, Issue 2,2019 (Scopus)
7.	Heart signal analysis on multi-domain featuresextraction by SVM classifier in smart monitoring system	International Journal of Innovative Technology and Exploring Engineering,2019(Scopus)
8.	Optimization of Recent aspects of power converters	International Journal of Scientific & Technology Research, Vol8, Issue 11, 2019.(Scopus)

9.	A Wavelet Transform Based Feature Extraction and Classification of Cardiac Disorder	Journal of medical systems, Springer, Volume 38, Issue 9,pp. 1-11,2019
10.	An Approach for ECG Feature Extraction and Classification of Cardiac Abnormalities	Cardiovascular Pharmacology: Open Access c Pharm Open Access 2018, 7:1 , PP. 1-4,2018.
11.	Sensor less stator field oriented-direct torque and speed and Torque control for induction motor based on integrated hybrid control system	International journal of Emerging Technologies and Innovative, Volume 5, Issue 11, pp. 404-410.
12.	Secure and robust QR decomposition Fragile watermarking scheme	Journal ICON, Volume 3, Issue 6. pp.34-37.
13.	Virtual Power Grid on Solar by Transparent CNT's Using IR Medium	International Conference on smart cities, IEEE Digital Explore
14.	Pitch Control Scheme for a Continuous Wind Energy Conversion System	International Journal of Applied Engineering Research, Volume 10, Issue 3,pp.7807-7814,2018.
15.	A Smart Energy Efficient Lighting System Based On Intelligent Controller And Sensors	International Journal of Applied Engineering Research, Volume 10, Issue 3, pp.5427-5434,2018.
16.	Telemedicine Technology In Wireless Network	International Journal of Applied Engineering Research, Volume 10, Issue 2,pp.2362 -2367
17.	A Wavelet Transform based SVM Analysis of ECG Signals - Detection of Cardiac Abnormality	Elixir International Journal, Volume 10, Issue 2,pp.36946-36949
18.	Reduction of Electromagnetic Interference Cuk Converter for Aircraft Application	Elixir International Journal, Volume 10, Issue 2,pp.36943-36945
19.	Control of Non Linear Spherical Tank Level Process	International Journal for research in applied science and Engineering Technology Volume 3, Issue 2, pp.2321-2326.
20.	Detection of Myocardial Ischemia In ECG Signals Using Support Vector Machine	International Journal for Research in Applied Science & Engineering Technology, Volume 4 Issue 3
21.	A Review on Maximum Power Point Tracking for Increasing Solar Photovoltaic Efficiency	International Journal for Scientific Research & Development, Volume 4 Issue 2
22.	A Study of Control of Self Balancing Robot System	Middle-East Journal of Scientific Research,

23.	Modelling and Simulation of Non Linear Spherical Tank Level Process	Asian Journal of Research in Social Sciences and Humanities, Volume 6, Issue 5
24.	A New Wavelet Transform Based Feature Extraction and Classification of Life-Threatening Cardiac Arrhythmias	International Medical Journal, Volume 23, Issue 3
25.	Behavior Modification of PID Controller for AVR System Using Particle Swarm Optimization	Behavior Modification of PID Controller for AVR System Using Particle Swarm Optimization
26.	Automatic Control Loop Tuning of PMAC Servo Motor Drives Using PID Controller	Automatic Control Loop Tuning of PMAC Servo Motor Drives Using PID Controller
27.	Classification of Ventricular Arrhythmia using Bat Algorithm	International Journal of Advanced Science and Engineering, Volume 3, Issue 1
28.	Power Factor at Instantaneous Load using ARC Welding Machine	International Journal for Scientific Research & Development, Volume 5, Issue 1
29.	Uncertain finding of Roof-Holes due to Earthquake-Triggered from UAV Images by Using Support Vector Machine	International Journal of Advanced Science and Engineering, Volume 3 Issue 3
30.	Optimal Tuning of PID Controller for AVR System using Modified Particle Swarm Optimization	Advances in Natural and Applied Sciences, 2017 Special 11(6)
31.	Automation of Petroleum Filling Stations Using Solid State Controller	Advances in Natural and Applied Sciences, 2017 Special 11(6):
32.	3D Reconstruction and Pseudo Coloring of Images in Digital Mammography	International Review on Computers and Software, Volume 9, Issue 8, 1366-1372
33.	Telemedicine Technology In Wireless Network.	International Journal of Applied Engineering Research, Volume 10, Issue 2.
34.	Analysis Of Early Myocardial Infarction Detection Using Discrete Wavelet Transform	International Journal of Applied Engineering Research, Volume 9, Issue 12, pp.23925-23934
35.	Rule Based Evaluation of Myocardial Ischemia in ECG Signals Using Wavelet Transform	International Journal of Scientific Research, Volume 3, Issue 5, pp.165-167
36.	Comparative study of QRS complex detection in ECG based on discrete wavelet transform	International Journal of Recent Trends in Engineering, Vol2 Issue 5, 2009.
37.	Recognition and Classification System of Cardiac Arrhythmia Using ANFIS	International Review on Computers and Software, Vol 7, Issue 5, 2012.

38.	A Novel Algorithm for Quick QRS Complex Detection in ECG Based On Discrete Wavelet Transform	Digital Image Processing, Vol1, Issue 2, 2019
https://orcid.org/0000-0002-1172-6726 Web of Science Researcher ID : AAA-2617-2019 Scopus h index – 05, Scopus Indexed Journal : 17 , Citation : 126		
	Patent application publication – Publication date (Priority Date) : 01/02/2019 – India, Industrial induction heater power converting system and a method thereof The Quick Witted Cradle - Design patent (Awaiting) for Examination Application No. : 202041011231 Date of Filling : 16/03/2020 Title of the Invention : HYBRID SOLAR POWER GENERATION WITH LIGHTING SYSTEMS IN STREET LIGHT Publication Date : 27/03/2020 Application No. : 202041017580 Date of Filling : 24/04/2020 Quick – witted cloth cradle for newborn babies to reduce sleep disorders Publication Date : 29/05/2020	

Conference Publications:

S.No.	Title of the Paper	Title of the Conference / Seminar / Workshop	Organized by
1	Virtual Power Grid on Solar by Transparent CNT's Using IR Medium	International Conference on smart cities	Indian Institute of Technology, Madras
2	Design and Development of smart metro payment system	National Level Technology Exhibition	Anna University , Chennai
3	Design and Implementation of Solar Umbrella	National Conference on Advancements in Electrical sciences	SNS College of Technology

4	Image processing based blood cancer cell detection using LABVIEW	National Conference on Advancements in Electrical sciences	SNS College of Technology
5	Behavior Modification of PID Controller for AVR System Using Particle Swarm Optimization	International Conference on Emerging devices and smart systems	Mahendra Engineering College
6	Automatic Control Loop Tuning of PMAC ServoMotor Drives Using PID Controller	International Conference on Emerging devices and smart systems	Mahendra Engineering College
7	Automation of Petroleum Filling Stations Using Solid State Controller	International Conference on Engineering Technology and Science	Muthayammal Engineering College
8	Renewable energy source piezo electric harvesters in car tyres	International Conference on Green Engineering and Technologies	Karpagam College of Engineering
9	A wavelet transform based SVM analysis of ECG signals	International Conference on Computing , Communication and Electrical Technologies	Vivekanadaa College of Engineering for Women
10	Double MPPT with SEPIC Converter for grid connected hybrid system	International Conference on Future trends in control, communication and power	Excel College of Engineering and Technology
11	A wavelet transform based ANFIS analysis of ECG signals	2 nd International Conference on Trends in Technology for Convergence	AVS Engineering College