E.G.S.PILLAY ENGINEERING COLLEGE

FACULTY PUBLICATIONS

2024-25

S.No	Name/Department	Title	Journal Name	Indexing
1.	**Dr.S. Senthil kumar/ECE, S Senthilkumar, Dr. V Mohan/EEE, Dr. M Chinnadurai/CSE, Dr. M Nuthal Srinivasan/ECE, Dr. L Ramachandran/ECE**	Nature-inspired MPPT algorithms for solar PV and fault classification using deep learning techniques	Discover Applied Science	**Scopus**
2.	**Dr. P. Mohamed Ali/S&H**	Public of local students anticipation at communication skills course in common	*Journal of tamil studies*	**UGC**
3.	**Dr. M. Chinnadurai/CSE**	Hybrid quantum enhanced federated learning for cyber-attack detection	*Scientific Reports*	**SCIE**
4.	**Dr. S. Praveen Kumar/CSE**	Advanced generative adversarial network for optimizing layout of wireless sensor networks	*Scientific Reports*	**SCIE**
5.	**Mr. S. Murugesh/Mechanical**	Investigating the combined effects of hydrogen-enriched second-generation biodiesel blends derived from Colza and Margosa oils in dual-fuel compression ignition engine	*International journal of hydrogen energy*	**SCIE**
6.	**Dr. N. H. Agilandeswari/Civil**	Tribological behavior of AA7075 hybrid composites reinforced with Al2O3 and TiO2 particles	*Journal of ceramic processing research*	**SCIE**
7.	**Dr. R. Karthi/MBA**	A Critical Analysis of Key Management Techniques in Applied Cryptography	IEEE Xplore Conference Proceedings	**Scopus**
8.	**Dr. S. Manikandan/IT**	Undergraduate Programme PO and PSO attainment using deep learning	*Taylor and francis*	**Scopus***
9.	**Dr. M. Malathi/ ECE**	Hybrid plasmonic biosensors with deep learning for Colorectal cancer detection	*Plasmonics*	**SCIE**

	Dr. V. Sivaramakrishnan /Mech, Dr.V. Navaneethakrishnan /Mech	Mechanical and Swelling Properties of EPDM/SBR Nanocomposites Containing Resorcinol- and Hexamethylenetetramine-Modified HNTs	*Polymer Korea*	**SCIE**
11.	Dr.V. Karthikeyan/S&H, Dr.P.Adwin Jose/Physics , Dr.C. Gopi , Dr.S. Ponsadailakshmi/Physics, Dr.N. Moorthy/Physics, Dr. E.Edward Anand/Physics	Tuning the cathode power to Deposit Amphoteric Vanadia as a dimethylamine sensor at room temperature	*Materials letters*	**SCIE**
12.	Mr. K Senthil Nathan/Mech, Dr. S Krishnamohan/Mech, Dr. V Navaneetha Krishnan/Mech	Study on the effect of halloysite nanotubes on the mechanical properties and swelling resistance of ethylene-propylene diene monomer (EPDM)/nitrile butadiene rubber (NBR) blend nanocomposites	*Materials research express*	**SCIE**
13.	Dr. V Navaneetha Krishnan/Mech	Impact of In-Situ Functionalization of Carbon Nanotubes Using Bis (Triethoxysilylpropyl) Tetrasulfide on the Properties of EPDM/SBR–CNT Composites	*Journal of Inorganic and Organometallic Polymers and Materials*	**SCIE**
14.	Dr Arul Selvan G/IT	Routing attacks detection in MANET using trust management enabled hybrid machine learning	*Wireless networks*	**SCIE**
15.	Dr.S. Senthilkumar/ECE; Mrs.S. Vetriselvi/ECE; Dr. M. Malathi/ECE; **Dr. S. Praveen Kumar/CSE**	Super-Resolution Image using Enhanced Deep Residual Networks and the DIV2K Dataset	IEEE Xplore Conference Proceedings	**Scopus**
16.	Dr. D. Devarajan/ECE; Dr.S. Senthilkumar/ECE; Dr. M. Malathi/ECE; **Dr.L.**	Design and Implementation of Frame Work for Building Extraction using Fast Accurate Bilateral Filter, Fast Corner Method and Improved Gaussian Blur	IEEE Xplore Conference Proceedings	**Scopus**

	Ramachandran/ECE			
17.	**Dr. S. Subashree/CSE;** **Dr. G. Pushpa/CSE;** **Dr. S. Senthilkumar/ECE;** **Mrs. E. Saranya/CSE**	A study on Efficiency of Bio Medical Data Extraction from PubMed Dataset using Elastic Search Engine	IEEE Xplore Conference Proceedings	**Scopus**
18.	**Mrs.K. Vembarasi;** **Dr. S. Praveen Kumar/CSE T. Dr.S. Senthilkumar/ECE;**	Adaptive Error Correction and Machine Learning for Robust Optical Fibre Communication	IEEE Xplore Conference Proceedings	**Scopus**
19.	**Mr. R. Rajesh/CSBS**	*Facial Expression Analysis using K-Nearest Neighbor Classification Method: Enhancing Emotion Detection and Stress Monitoring in an Interactive Music Player*	*IEEE Xplore Conference Proceedings*	**Scopus**
20.	**Dr. R. Karthi/MBA**	*Exploring potential predictors of psychological distress among employees: A Generalized ARC-GRU Based Model*	*IEEE Xplore Conference Proceedings*	**Scopus**
21.	**Mr. L. Anbazhagan/ECE, Dr. Senthilkumar/ECE &Mrs.M. Kavitha/ECE**	*Data Security in Cloud Computing using Maritime Search and Rescue Algorithm*	*IEEE Xplore Conference Proceedings*	**Scopus**
22.	**V. Lakshmi Praba/ECE,** **Dr. S. Senthilkumar/ECE;** **Mrs.M. Kavitha/ECE;** **Mr.L. Anbazhagan/ECE**	*A Hyrbid Optimization based Secured Communication in Wireless Sensor Networks through Blockchain Technology*	*IEEE Xplore Conference Proceedings*	**Scopus**
23.	**Mrs.M. Kavitha/ECE;** **Dr. S. Senthilkumar/ECE;** **Dr. V. Mohan/EEE**	*An Advanced Rice Plant Disease Classification Through a Modified Efficient Net Deep Learning Model*	*IEEE Xplore Conference Proceedings*	**Scopus**
24.	**Dr. S. Senthilkumar/ECE**	Design of modified long short-term memory-based zebra optimization algorithm for limiting the issue of SHEPWM in multi-	*Scientific Reports*	**SCIE**

		level inverter		
25.	Dr. S. Subashree/CSE	A Comprehensive Evaluation of Fake Face Recognition Scheme using Artificial Intelligence Oriented Learning Scheme	*IEEE Xplore Conference Proceedings*	**Scopus**
26.	Dr. S. Ambika/IT	Implementing a Novel Blockchain Algorithm for Enhanced Data Integrity in Cloud Systems	*IEEE Xplore Conference Proceedings*	**Scopus**
27.	Dr.V. Sivaramakrishnan/ Mech , Dr.V. Navaneethakrishnan/Mech	Improved mechanical performance and swelling resistance of ethylene propylene diene monomer/styrene butadiene rubber nanocomposites through the incorporation of graphene oxide as a reinforcing filler	*Journal of polymer research*	**SCIE**
28.	Dr. M. Vinoth Kumar/EEE	Marine predators algorithm with deep learning based solar photovoltaic system modelling and optimization of green hydrogen production	*Renewable Energy*	**SCIE**
29.	Dr. R. Karthi/MBA	The impact of stress on IT employees' health and its consequential effects on productivity	*Multidisciplinary Science Journal*	**Scopus**
30.	Dr. G. Gurumoorthi/Mech, Dr. S. Senthilkumar/ECE,	A hybrid deep learning approach to solve optimal power flow problem in hybrid renewable energy systems	*Scientific Reports*	**SCIE**
31.	Dr. S. Ramabalan/Mech Dr. V. Sathiya/ECE	An experimental investigation on copper square electrode wear in electric discharge machining of Hastelloy B2	*Scientific Reports*	**SCIE**
32.	Dr. A. Arunkumar/Mech & Dr. V. Navaneethakrishnan/Mech	Comparative Analysis of Cure Behaviors, Mechanical Properties, and Swelling Resistance in EPDM/SBR Composites with HNTs, APTES-Modified HNTs, and RH-Modified HNTs	*Silicon*	**SCIE**
33.	Dr. N. Ramanujam/Mech	A novel development of hybrid maximum power point tracking controller for solar pv systems with wide voltage gain DC-DC converter	*Scientific Reports*	**SCIE**
34.	Dr. S. Manikandan/IT	Optimizing connectivity: a novel AI approach to assess transmission levels in optical networks	*The Journal of Supercomputing*	**SCIE**
35.	Dr. RS Koteeshwari/ECE	Studies on silver-doped magnesium ferrite	*Journal of*	**SCIE**

		utilizing the sol–gel process in terms of structure, magnetism, electricity, and electrochemistry	*Molecular Structure*	
36.	**Dr. M. Nuthal Srinivasan/ECE, Dr. M. Chinnadurai/CSE, Dr. S. Senthilkumar/ECE**	An effective video inpainting technique using morphological Haar wavelet transform with krill herd based criminisi algorithm	*Scientific Reports*	**SCIE**
37.	**Mr. J. Noorul Ameen/CSE**	Utilizing flexible, robust optimization for the integration of renewable energy sources and electric cars in a large-scale Vehicle-to-Grid (V2G) network	*IEEE Xplore Conference Proceedings*	**Scopus**
38.	**Mrs. S. Shajathi Begam/CSBS**	Efficient and Resilient Placement Strategy for Electric Vehicle Charging Stations, Incorporating Renewable Energy and Storage Equipment in Distribution Networks	*IEEE Xplore Conference Proceedings*	**Scopus**
39.	**Mr. G. Murugan/CSBS**	Artificial Intelligence-based scheduling with Multi-Objective Power Optimization in Smart Homes Utilizing Particle Swarm Optimizer	*IEEE Xplore Conference Proceedings*	**Scopus**
40.	**Mr. R. Ayyappa/ECE**	Independent hybrid energy systems using reliable renewable energy sources for providing sustainable power and CO2 emission reduction	*IEEE Xplore Conference Proceedings*	**Scopus**
41.	**Dr. M. Irshad Ahamed/ECE**	Smart Prediction Models for Energy Efficiency in Smart Residential Buildings: A Deep Learning	*IEEE Xplore Conference*	**Scopus**

		Approach	*Proceedings*	
42.	**Dr. M. VinothKumar/EEE**	Advancements in Energy-Autonomous Wireless Sensor Networks: Integrating Simultaneous Energy Harvesting and Ambient Light Sensing Systems	*IEEE Xplore Conference Proceedings*	**Scopus**
43.	**Dr. M. Nuthal Srinivasan/ECE**	Metal hydride hydrogen storage and compression systems for energy storage: modeling, synthesis, and properties	*IEEE Xplore Conference Proceedings*	**Scopus**
44.	**Dr. A.Sundar raj/BME**	Synchronized Optimization of Smart Home Appliance Scheduling and Cost-Effective Energy Management Using Harris-Hawks Algorithm in Smart Grids	*IEEE Xplore Conference Proceedings*	**Scopus**
45.	**Dr. S. Chitra/BME**	Comprehensive Performance Assessment and Power Prediction Methodology for Bifacial Photovoltaic Solar Panels in Offshore and Rooftop Applications	*IEEE Xplore Conference Proceedings*	**Scopus**
46.	**Dr. R. Karthi/MBA**	The impact of stress on IT employees' health and its consequential effects on productivity	*Multidisciplinary Science Journal (Conference Proceedings)*	**Scopus**
47.	**Dr. D. Devarajan/ECE, Dr. S.**	Human monkeypox disease prediction using novel	*Scientific Reports*	**SCIE**

	Senthilkumar/ECE	modified restricted Boltzmann machine-based equilibrium optimizer		
48.	K. Krishnaram/EEE, S. Sivamani/EEE & S. Senthilkumar/ECE	Experimental design and analysis of advanced three phase converter for PV application with WCO-P&O MPPT controller	*Scientific Reports*	SCIE
49.	K. Krishnaram/EEE, T. Suresh Padmanabhan/EEE, Senthilkumar/ECE	Development of grey wolf optimization based modified fast terminal sliding mode controller for three phase interleaved boost converter fed PV system	*Scientific Reports*	SCIE
50.	M Irshad Ahamed/ECE, N Prathap/ECE, S Senthil Kumar/ECE, M Nuthal Srinivasan/ECE, M Malathi/ECE	Hybrid Solar Paint Based on TiO2/CdS Nanomaterials	*Nanotechnology Perceptions*	Scopus
51.	S Sivamani/EEE, S Senthilkumar/ECE	An improved nested 3-phase 5-level MLI design with optimized output voltage and total harmonic distortion	*Engineering Research Express*	Scopus
52.	S Ponsadai Lakshmi/Chemistry, C Gopi/Chemistry, P Adwin Jose/Chemistry	Mamdani-type fuzzy inference system for irrigational water quality	Journal of the Nigerian Society of Physical Sciences	Scopus
53.	M Irshad Ahamed/ECE	Route Critical Nets in Upper Layers to Fix Timing Issues in Block Level CTS	*IEEE Xplore Conference Proceedings*	Scopus

54.	K. Gokulraj/EEE	Advanced Machine Learning-Driven Security and Anomaly Identification in Inverter-Based Cyber-Physical Microgrids	*Electric Power Components and Systems*	SCIE
55.	V. Yokeswaran/EEE	Growth, investigation of calcium D-gluconate monohydrate-CDG crystals with shocked impact for electronic usage and the pure crystal for sensor application	*Journal of Materials Science: Materials in Electronics*	SCIE
56.	S. Jim Hawkinson/BME A. Sundar Raj/BME S. Senthilkumar/ECE K. Balasubramaniyan/CSE M. Chinnadurai/CSE	A Efficient Approach of Image Stegnorgrapy Using Advanced Encryption System and Deep Neural Network	*IEEE Xplore Conference Proceedings*	Scopus
57.	Mr. A. Baskar/CSE	Deep optimization algorithm for emergency-aware data transmission in Mobile-Ad Hoc Networks.	*Journal of intelligent and fuzzy system*	SCIE
58.	Mr. A. Baskar/CSE	Hybrid Optimization-Based Multi-Path Routing for Dynamic Cluster-Based MANET	*Cybernetics and System*	SCIE
59.	Dr. S. Manikandan	Factors driving business intelligence adoption: an extended technology-organization-environment framework	*Indonesian Journal of Electrical Engineering and*	Scopus (Q2)

			Computer Science	
60.	Mr. K. Krishnaram/EEE Dr. T. Suresh Padmanaban/EEE Dr. S.Senthil Kumar/ECE	Performance optimization of interleaved boost converter with ANN supported adaptable stepped-scaled P&O based MPPT for solar powered applications	*Scientific Reports*	**SCIE (Q1)**
61.	Dr. K. Raju/IT Dr. R. Lavanya/IT Ms. S. Preethi/IT	Data privacy preserving for efficient query services using RASP for a health record transactions in a two-cloud secure database	*AIP Conference Proceedings*	**Scopus**
62.	Mr. K. Nandakumar/EEE Dr. V. Mohan/EEE Dr. S.Senthil Kumar/ECE	Design and analysis of solitary AC–AC converter using reduced components for efficient power generation system	*Scientific Reports*	**SCIE (Q1)**
63.	Dr. M. Chinnadurai/CSE	Modeling an Enhanced Modulation Classification Approach using Arithmetic Optimization with Deep Learning for MIMO-OFDM Systems	*Measurement Science Review*	**SCIE**
64.	Dr. K Balasubramanian/CSE Mr. N. Kannan/CSE Dr. N. Murali/CSE	Next-Gen Parking Facilities: Deep Learning for Face and License Plate based Access	*IEEE Xplore Conference proceedings*	**Scopus**
65.	Dr. K Balasubramanian/CSE Dr. A. Emmanuel Peo Mariadass/CSE Dr. N. Murali/CSE	Emotion-driven Activity Detection: Detecting Activities Perception through Facial Feature Analysis in Educational Environments	*IEEE Xplore Conference proceedings*	**Scopus**
66.	Dr. N. Murali/CSE	A GPS-based Face Attendance Register System	*IEEE Xplore*	**Scopus**

		using Android Applications stored in the Cloud	*Conference proceedings*	
	Dr. R. Rajesh/CSBS Dr. A. Emmanuel Peo Mariadass/CSE Dr.S. Palani Murugan/AIDS Dr. S. Manikandan/IT			
67.	Dr. M Priya/CSE Mrs. B Ranjani/CSE Mrs. K Rajammal/CSE Dr. N Murali/CSE	Automatic Emotion Detection using SVM-based Optimal Kernel Function	*IEEE Xplore Conference proceedings*	**Scopus**
68.	Dr. R. Manivannan/CSE **Dr. S.Senthil Kumar/ECE**	Improved Restricted Boltzmann Machine-based Optimization Model for the Network Security System in Cloud Environment	*Engineering Research Express*	**Scopus**
69.	Mrs. K. Vembarasi/ECE Dr. S. Senthilkumar/ECE Dr. L. Ramachandran/ECE Ms.V. Lakshmi Praba/ECE Mrs, S. Vetriselvi/ECE Dr. M. Chinnadurai/CSE	White Spot Syndrome Detection in Shrimp using Neural Network Model	*IEEE Xplore Conference proceedings*	**Scopus**
70.	Dr.V. Sathiya/ECE Dr. S. Ramabalan/Principal **Mrs. K. Nagalakshmi/IT**	Mobile Robot Multi-Objective Trajectory Planning with Velocity obstacles	*IEEE Xplore Conference proceedings*	**Scopus**
71.	Dr. T. Ganesan/CSE Dr. N. Murali/CSE Dr. S. Palani Murugan/AIDS Dr. P. Anand Raj/CSBS	Intelligent Gen: An Efficient On-Demand Access Protocol in MANETs using Network Simulator - 2	*IEEE Xplore Conference proceedings*	**Scopus**

	Dr. S. Manikandan/IT		*IEEE Xplore Conference proceedings*	
72.	**Dr. T. Ganesan/CSE** **Dr. N. Murali/CSE** **Dr. S. Manikandan/IT**	Performance Comparison of MANETs under Congestion and Packet Loss using Distance based Geographic Routing Protocols	*IEEE Xplore Conference proceedings*	**Scopus**
73.	**Dr. M. Chinnadurai /IT**	A combined deep CNN with a chimp optimization approach for lung cancer diagnosis	*Journal of Intelligent and Fuzzy Systems*	**SCIE**
74.	**Dr. R.Manivannan/CSE** **Dr. S. Manikandan/IT**	Location based Access Privileges and Controlling the Clustering in Sustainable 5G Challenges	*Salud, Ciencia y Tecnologia - Serie de Conferencias*	**Scopus**
75.	**Dr. N. Murali/CSE** **Dr. S. Manikandan/IT** **Dr. S. Palani Murugan/AIDS**	Smart Commodities Public Distribution System using IoT	*Salud, Ciencia y Tecnologia - Serie de Conferencias*	**Scopus**
76.	**Dr. R.Manivannan/CSE** **Dr. S. Senthilkumar/ECE** **Dr. N. Prathap/ECE**	Performance enhancement of cloud security with migration algorithm for choosing virtual machines in cloud computing	*Engineering Research Express*	**Scopus**
77.	**Mrs. M. Kavitha** **Dr. S. Senthilkumar/ECE** **Mrs. E. Saranya/CSE**	Smart Environment and Plant Disease Monitoring with Analysis System in Agricultural Field	*IEEE Xplore Conference Proceedings*	**Scopus**
78.	**Dr. M. Irshad Ahamed/ECE** **Dr. N. Prathap/ECE**	Quantum size effects on PbSeS semiconductor quantum dots, an experimental and theoretical	*Chalcogenide Letters*	**SCIE**

		approach		Scopus
79.	Dr. R.Manivannan/CSE	Privacy-Preserving Image Storage on Cloud Using An Unified Cryptographic Authentication Scheme	*Salud, Ciencia y Tecnologia - Serie de Conferencias*	Scopus
80.	Dr. K. Balasubramanian/CSE, Dr. R. Manivannan/CSE Dr. S. Manikandan/IT	Learning Of Energy Efficient And Network Traffic Delay In Wireless Networks Using Channel Aware Routing	Journal of Theoretical and Applied Information Technology	Scopus
81.	Dr. S. Sivamani/EEE & Dr. S. Senthil Kumar/ECE	A quad DC source switched three-phase multilevel DC-link inverter topology	Scientific Reports	SCIE
82.	Mr. G. Arulselvan/CSE Mrs. S. Subashree/CSE	Crop yield prediction using multi-attribute weighted tree-based support vector machine	Measurement: Sensors	Scopus
83.	Dr. S. Sivamani/EEE	Automated sand depositing system for sand casting process	AIP Conference Proceedings	Scopus
84.	Dr. S. Senthil Kumar/ECE, Mrs. E. Saranya/CSE, Mrs. M. Kavitha/ECE and Dr.S.Rajasri/ECE	A novel and smart administrative door lock and open system using face recognition	IEEE Xplore	Scopus
85.	Dr. S. Krishna Mohan/ Mechanical	Azadirachta indica seed powder–reinforced and nano sand–filled USPER membrane for oil/seawater separation	Biomass Conversion and Biorefinery	SCIE
86.	Dr.V. Navaneethakrishnan/Mech, Dr. G. Gurumoorthi/Mech	Effect of modified nanographene oxide (mGO)/carbon nanotubes (CNTs) hybrid filler on the cure, mechanical and swelling properties of silicone rubber composites	Journal of Inorganic and	SCIE

			Organometallic Polymers and Materials	
87.	**Dr.L. Ramachandran/ECE & Dr. S.Senthil Kumar/ECE**	Shrimp classification for white spot syndrome detection through enhanced gated recurrent unit-based wild geese migration optimization algorithm	Virus Zenes	**SCIE**
88.	**Dr. N. Prathap/ECE & Dr. M. Irshad Ahamed/ECE**	Attenuated solitons through some dispersion profiles in a tapered inhomogeneous fiber with erbium effect	Optical and Quantum Electronics	**SCIE**
89.	**Dr. M. Malathi/ECE**	Enhancing Network Lifetime of WSNs through the Implementation of a Modified Ant Colony Optimization Algorithm	Procedia Computer Science	**Scopus**
90.	**Dr. B. Ashwini/Civil**	Comparison of mechanical properties of concrete incorporated with Multiwalled Carbon nanotube and partial replacement of cement with flyash	Materials Today Proceedings	**Scopus**
91.	**Dr. B. Ashwini/Civil**	Fabrication of and corrosion prevention mechanisms of tin oxide (SnO2) decorated reduced graphene oxide (rGO) for anodic protection of Zn metal surfaces	Bulletin of the Chemical Society of Ethiopia	**SCIE**
92.	**Dr. M. Priya/CSE**	Computational Overhead Analysis for Mitigation	Procedia	**Scopus**

		of Content Poisoning Attack in NDN-based IoT Body Area Networks	Computer Science	
93.	**Dr. S. Ramabalan/ Principal**	Enhancement of Mechanical Performance and Swelling Resistance in Silicone Rubber through Reinforcement with γ-Methacryloxypropyltrimethoxysilane-Modified Halloysite Nanotubes	Journal of Inorganic and Organometallic Polymers and Materials	**SCIE**
94.	**Dr. R. Manivannan/CSE**	Research on IoT-based hybrid electrical vehicles energy management systems using machine learning-based algorithm	Sustainable Computing: Informatics and Systems	**SCIE**
95.	**Dr. V. Manathunainathan/ Mechanical & Dr. S. Krishnamohan/Mechanical**	Fabrication of low-cost USPER nanocomposite membrane for oil/seawater separation	Chemical Papers	**SCIE**
96.	**Dr. M. Chinnadurai/CSE**	Brain Tumour Segmentation Using Adaptive Deep Convolutional Neural Network System	International Journal of Intelligent Systems and Applications in Engineering	**Scopus**
97.	**Dr.S. Manikandan/IT**	Review of Feedback Analysis of Business Process	Migration Letters	**Scopus**

		Outsourcing		