

Details of Research Publications

ACADEMIC YEAR 2021 – 2022

S.No	Author Name	Title of the Paper	Name of the Journal / Conference, Volume No, Issue No, Month & Year	Indexing Scopus/ SCI/ SCIE/ WoS etc	Online Link of the Paper
1.	Dr. Sanjeevikumar P.	Fuel cell-based topologies and multi-input DC–DC power converters for hybrid electric vehicles: A comprehensive review	IET Generation, Transmission & Distribution, Vol.16, Issue 11 June 2022	SCI	https://ietresearch.onlinelibrary.wiley.com/doi/full/10.1049/gtd.2.12439
2.	Dr. Sanjeevikumar P	Metaheuristic-based Near-Optimal Fractional Order PI Controller for On-grid Fuel Cell Dynamic Performance Enhancement	Electric Power Systems Research, Volume 208, July 2022	SCI	https://www.sciencedirect.com/science/article/abs/pii/S0378779622001274
3.	Dr. Sanjeevikumar P	An efficient, robust optimization model for the unit commitment considering renewable uncertainty and pumped-storage hydropower	Computers and Electrical Engineering, Vol. 100, May 2022	SCI	https://www.sciencedirect.com/science/article/abs/pii/S0045790622001380#aep-article-footnote-id1
4.	Dr. Mohana Sundaram K.	Sinusoidal pulse width modulation for a photovoltaic-based single-stage inverter	Environmental Science and Pollution Research, Vol. 29, Issue 20, Apr 2022	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85122543447&doi=10.1007%2fs11356-021-18422-1&partnerID=40&md5=360390e00aea01650e3de1b66bfd76f7

5.	Dr. Mohana Sundaram K.	Prediction of hourly solar radiation in Tamil Nadu using ANN model with different learning algorithms	Energy Reports, Vol. 08, Apr 2022	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85122534758&doi=10.1016%2Fj.egy.2021.11.190&partnerID=40&md5=0ff4bac1db3f572ac458de2e3bc224b5
6.	Dr. Mohana Sundaram K.	Experimental investigation of removal of flue gas emissions exhaust from municipal solid waste incinerator using photovoltaic-based electrostatic precipitator	Environmental Science and Pollution Research, Vol. 29, Issue 8, Feb 2022	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85115082724&doi=10.1007%2Fsf11356-021-16378-w&partnerID=40&md5=8014ded49d862badf6a30fc85a2f5889
7.	Dr. Mohana Sundaram K.	Cuckoo search assisted fuzzy logic algorithm for smart WSN routing system	International Journal of Ad Hoc and Ubiquitous Computing, Vol. 40, Issue 1-3, 2022	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85133423789&doi=10.1504%2Fijahuc.2022.123532&partnerID=40&md5=5018d24d20ad197e7cbeefdb79727bb0
8.	Dr. Mohana Sundaram K.	Automatic ECG analysis system with hybrid optimization algorithm based feature selection and classifier	Journal of Intelligent and Fuzzy Systems, Vol. 43, Issue 1, 2022	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85131750208&doi=10.3233%2Fjifs-212373&partnerID=40&md5=b9343ea1f705bc1e9c29f6957870a2f8
9.	Dr. Mohana Sundaram K.	Power-Sharing Analysis of Hybrid Microgrid Using Iterative Learning Controller (ILC) considering Source and Load Variation	Mathematical Problems in Engineering, Vol. 2022, 2022	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85131215296&doi=10.1155%2F2022%2F7403691&partnerID=40&md5=012b086abd437ecaa784a62792be7a44

10.	Dr. Mohana Sundaram K.	Shading and texture constrained retinex for correcting vignetting on dermatological macro images	Visual Computer, Vol. 39, Issue 2, Feb 2022	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85122743156&doi=10.1007%2fs00371-021-02368-z&partnerID=40&md5=dcd23faefcfabe1fc1c5795a71ded16a
11.	Dr. Uthirasamy R. Dr. Kumar Chinnaiyan V. Dr. Karthick A.	Design of Boosted Multilevel DC-DC Converter for Solar Photovoltaic System	International Journal of Photoenergy, Vol. 2022, January 2022	SCI	https://www.hindawi.com/journals/ijp/2022/1648474/
12.	Dr. Chandrika V.S.	Performance enhancements of conventional solar still using reflective aluminium foil sheet and reflective glass mirrors: energy and exergy analysis	Environmental Science and Pollution Research, Springer, Vol. 28, Feb 2021	SCI	https://doi.org/10.1007/s11356-021-13087-2
13.	Dr. Chandrika V.S.	Comparison of Fuzzy Logic Systems and its Applications using Mathematical and Technological Perspective	International Journal of Aquatic Science, Vol.12 Issue.02 July 2021	WoS	http://www.journal-aquaticscience.com/article_132564_9e7125964741c2cfea53f42dd3569cdf.pdf
14.	Dr. Chandrika V.S.	Sustainable Energy Harvesting for Self-Powered Micro/Nanosystems Enabled by Nanotechnology	Journal of Nuclear Energy Science & Power Generation Technology, Vol.10 Issue.09 September, 2021	Scopus	https://www.scitechnol.com/peer-review/sustainable-energy-harvesting-for-selfpowered-micronanosystems-enabled-by-nanotechnology-kscZ.pdf
15.	Dr. Chandrika V.S.	Automatic Detection of Emotions in Vehicle Drivers Based on Analysis of Biomedical Data to Improve the Performance	International Journal of Biology, Pharmacy and Allied Sciences, Vol.10, Issue:11, November 2021	WoS	https://ijbpas.com/archive/archive-single-pdf/4226
16.	Dr. Chandrika V.S.	Experimental Investigation of the Solar Distiller using Nano-Black Paint for Different Water Depths	Materials Today: Proceedings, Elsevier, Vol. 56, Issue 3 December 2022	Scopus	https://www.sciencedirect.com/science/article/pii/S2214785321074630#!

17.	Dr. Chandrika V.S.	Natural Fiber Incorporated Polymer Matrix Composites for Electronic Circuit Board Applications	Advances in Materials Science and Engineering, Hindawi, Vol. 2022, January 2022	SCI	https://www.hindawi.com/journals/amse/2022/3035169/
18.	Dr. Chandrika V.S.	Chopping Down on Industry 4.0 using Automatic Power Factor Correction Units to Boost Power Performance	2022 International Conference on Electronics and Renewable Systems (ICEARS), IEEE Xplore, April 2022	Scopus	https://ieeexplore.ieee.org/document/9752321
19.	Dr. Pandiyan P.	Implementation of Different MPPT Techniques in Solar PV Tree under Partial Shading Conditions	Sustainability, Vol.13 Issue:13, July 2021	SCI	https://www.mdpi.com/2071-1050/13/13/7208
20.	Dr. Pandiyan P.	Artificial intelligence in tomato leaf disease detection: a comprehensive review and discussion	Journal of Plant Diseases and Protection, Vol. 129, August 2021	SCI	https://link.springer.com/article/10.1007/s41348-021-00500-8
21.	Dr. Pandiyan P.	Existence results for coupled differential equations of non-integer order with Riemann-Liouville, Erdélyi-Kober integral conditions.	AIMS Mathematics, Vol.6 Issue:12 September 2021	SCI	https://www.aimspress.com/article/doi/10.3934/math.2021752
22.	Dr. Karthick A.	Artificial Neural Network-Based Output Power Prediction of Grid-Connected Semitransparent Photovoltaic System	Environmental Science and Pollution Research, Vol. 29, September 2021	SCIE	https://link.springer.com/article/10.1007/s11356-021-16398-6
23.	Dr. Karthick A.	Integrated modeling and feasibility analysis of a rooftop photovoltaic systems for an academic building in Bangladesh	International Journal of Low-Carbon Technologies, Vol.16, Issue 4, Decemebr 2021	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85114817794&doi=10.1093%2fijlct%2fctab056&partnerID=40&md5=e6f085ac916c184ee2308121334cfaed

24.	Dr. Karthick A.	Performance analysis of domestic solar air heating system using V-shaped baffles – An experimental study	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, Vol 235, Issue 5, October 2021	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85106318415&doi=10.1177%2f09544089211016256&partnerID=40&md5=7de53dcba09a9270873095111e6ed5ea
25.	Dr. Karthick A.	Investigation on electric erosion behavior of nickel-based super alloy (Waspaloy: Ni, Cr, Co, Mo, Ti, Al) using response surface methodology	Surface Topography: Metrology and Properties, Vol. 9, Issue 3, September 2021	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85111078527&doi=10.1088%2f2051-672X%2fac0f33&partnerID=40&md5=58c5777481554afcf424aa888d6c2fbf
26.	Dr. Karthick A.	Review on the progress of building-applied/integrated photovoltaic system	Environmental Science and Pollution Research, Vol. 28, Issue 35, September 2021	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85110658900&doi=10.1007%2fs11356-021-15349-5&partnerID=40&md5=743180c5009f1550da66ffebbcf6bc9f
27.	Dr. Karthick A.	Performance enhancement of solar photovoltaic system for roof top garden	Environmental Science and Pollution Research, Vol.26, Issue 36, September 2021	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85105465300&doi=10.1007%2fs11356-021-14191-z&partnerID=40&md5=696f5fc72bc4f6b0bc30ab4bf47f3e9c
28.	Dr. Karthick A.	Comprehensive review on various parameters that influence the performance of parabolic trough collector	Environmental Science and Pollution Research, Vol.28, Issue 18, May 2021	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85103246790&doi=10.1007%2fs11356-021-13439-y&partnerID=40&md5=fa27ff5d0f35e38df5a565cf7b4dc272
29.	Dr. Karthick A.	Review on phase change materials for solar energy	Environmental Science and Pollution Research, Vol. 29,	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-

		storage applications	Issue 7, February 2021		85120343496&doi=10.1007%2fs11356-021-17152-8&partnerID=40&md5=903c9cb451668ff286c564baae194872
30.	Dr. Karthick A.	An Expert System for COVID-19 Infection Tracking in Lungs Using Image Processing and Deep Learning Techniques	BioMed Research International, Vol. 2021, 2021	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85120090645&doi=10.1155%2f2021%2f1896762&partnerID=40&md5=3d432f4bc29601150cff0183d658c88f
31.	Dr. Karthick A.	Design of Efficient Off-Grid Solar Photovoltaic Water Pumping System Based on Improved Fractional Open Circuit Voltage MPPT Technique	International Journal of Photoenergy, Vol. 2021, 2021	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85118157464&doi=10.1155%2f2021%2f4925433&partnerID=40&md5=6fc6f71fb4dda9b5a4d8dceec59bd14f
32.	Dr. Karthick A.	Investigations on Microstructure, Mechanical, Thermal, and Tribological Behavior of Cu-MWCNT Composites Processed by Powder Metallurgy	Journal of Nanomaterials, Vol. 2021, 2021	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85114624378&doi=10.1155%2f2021%2f3913601&partnerID=40&md5=052dd3cafbee2954f37ae02520b23ba7
33.	Dr. Karthick A.	Investigation of Dynamic, Mechanical, and Thermal Properties of Calotropis procera Particle-Reinforced PLA Biocomposites	Advances in Materials Science and Engineering, Hindawi, Vol. 2021, 2021	SCI	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85111061759&doi=10.1155%2f2021%2f2491489&partnerID=40&md5=caed77c4b05be5548285c89d565f23f7
34.	Dr. Karthick A.	Fabrication of MnO ₂ Nanocomposite on GO Functionalized with Advanced Electrode Material for Supercapacitors	Journal of Nanomaterials, January Vol. 2022, Jan 2022	SCI	https://www.hindawi.com/journals/jnm/2022/7929270/

35.	Dr. Karthick A.	Performance Evaluation of Cyclic Stability and Capacitance of Manganese Oxide Modified Graphene Oxide Nanocomposite for Potential Supercapacitor Applications	Journal of Nanomaterials, January Vol. 2022, Jan 2022	SCI	https://www.hindawi.com/journals/jnm/2022/7352246/
36.	Dr. Karthick A.	A Review on the Effect of Various Chemical Treatments on the Mechanical Properties of Renewable Fiber-Reinforced Composites	Advances in Materials Science and Engineering, Hindawi, Vol. 2022, Jan 2022	SCI	https://www.hindawi.com/journals/amse/2022/2009691/
37.	Dr. Karthick A., Dr. Pazhanimuthu C.	Role of Nanoparticles in Biodegradation and Their Importance in Environmental and Biomedical Applications	Journal of Nanomaterials, February Vol. 2022, Jan 2022	SCI	https://downloads.hindawi.com/journals/jnm/2022/6090846.pdf
38.	Dr. Karthick A., Dr. Karpagam J.	Investigating the Role of Image Fusion in Brain Tumor Classification Models Based on Machine Learning Algorithm for Personalized Medicine	Computational and Mathematical Methods in Medicine, February Vol. 2022, Feb 2022	SCI	https://downloads.hindawi.com/journals/cmmm/2022/7137524.pdf
39.	Dr. Karthick A.	Performance analysis of mixed vegetable oil as an alternative for transformer insulation oil	Biomass Conversion and Biorefinery, Jan 2022	SCI	https://link.springer.com/article/10.1007/s13399-021-02142-0
40.	Dr. Karthick A.	COVID-19 Detection Based on Lung Ct Scan Using Deep Learning Techniques	Computational and Mathematical Methods in Medicine, March Vol.2022, Feb 2022	SCI	https://www.hindawi.com/journals/cmmm/2022/7672196/
41.	Dr. Karthick A.	Human Centered Decision-Making for COVID-19 Testing Center Location Selection: Tamil Nadu—A Case Study	Computational and Mathematical Methods in Medicine, March Vol.2022, March 2022	SCI	https://www.hindawi.com/journals/cmmm/2022/2048294/
42.	Dr. Karthick A.	A Practical Approach for Predicting Power in a Small-	International Journal of Photoenergy, Vol.2022,	SCI	https://www.hindawi.com/journals/ijp/2022/9194537/

		Scale Off-Grid Photovoltaic System using Machine Learning Algorithms	March 2022		
43.	Ms. Saravanan G.	Implementation of IoT in Production and Manufacturing: An Industry 4.0 Approach	Materials Today: Proceedings, Elsevier, Vol. 51, Issue 8, March 2022	Scopus	https://www.sciencedirect.com/science/article/pii/S2214785321076264
44.	Dr. Ravindran S.	Energy Management of a Microgrid based on LSTM Deep Learning Prediction Model	Smart Technologies, Communication and Robotics (STCR), IEEE Xplore, Nov 2021	Scopus	https://ieeexplore.ieee.org/document/9588794
45.	Dr. Parimala V.	Soft Switching Converters for R-Converter for Domestic Induction by using MATLAB	2022 6th International Conference on Computing Methodologies and Communication (ICCMC), IEEE Xplore, April 2022	Scopus	https://ieeexplore.ieee.org/document/9753687
46.	Ms. Revathi R. Dr. Kumar Chinnaiyan V.	Machine Learning Based Smart Energy Management for Residential Application in Grid Connected System	2022 First International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT), IEEE Xplore, May 2022	Scopus	https://ieeexplore.ieee.org/iel7/9768398/9768400/09768420.pdf
47.	Mr. Vignesh C.J.	A 2.86-TOPS/W CMCB based Edge ML and RO-PUF engine for IoT based nano-electronic material applications	Materials Today: Proceedings, Vol. 62, Issue 4, June 2022	Scopus	https://www.sciencedirect.com/science/article/pii/S2214785321080846#!