

Research Publication by faculty

S.No	Name of the Faculty	Title of journal paper	Name of the Journal	Volume, Issue, page No.	Year
2023-2024					
1.	Dr. K. Siva	Design and Analysis of Tornado Strainer	Page 2 of 9 International Journal of Science, Engineering and Technology	Vol.11, No.8, pp-2348-2357	2023
2.	Dr. M. Mohanraj	Analysis of thermal and hydraulic performances for flow in a wavy channel with varying amplitude	<i>Journal of Thermal Analysis and Calorimetry</i>	Vol. 148; 517-531.	2023
3.	Dr. M. Mohanraj	Experimental investigations on a solar heat pump system having hybrid collector with dual cooling arrangements for delaying frost generation	<i>Thermal Science and Engineering Progress</i>	Vol.39; 101720.	2023
4.	S. Sivakumar, Dr. K. Siva Dr. M. Mohanraj	Energy performance and economic assessments of a solar air collector and compression heat pump water heater integrated solar humidifier desalination system.	<i>Journal of Processes Mechanical Engineering</i>	Vol. 237; Issue 5 20145-2059.	2023
5.	Dr. M. Mohanraj	Exergetic performance of a jet impingement bifacial photovoltaic-thermal (PVT) solar air collector with different	<i>Heat Transfer Engineering</i>	Accepted	2023

		packing factors and jet distributions			
6.	Dr. M. Mohanraj	Efficacy of refrigerants in thin metallic coated wickless heat pipes; a comparative study.	<i>Journal of Processes Mechanical Engineering</i>	Vol. 237; Issue 4; 1273-1285.	2023
7.	Dr. M. Mohanraj	Numerical performance investigation of a photovoltaic-thermal hybrid collector-evaporator with different tube configurations for heat pumps	<i>Journal of Processes Mechanical Engineering</i>	Accepted	2023
8.	Dr. M. Mohanraj	Experimental investigation and modeling of date drying under forced convection solar dryers	<i>Biomass Conversion and Biorefinery</i>	Accepted	2023
9.	Dr. M. Mohanraj	Investigations of performance characteristics on Direct Metal Laser Sintered MONEL K-500 Superalloy	<i>Materials Science and Technology</i>	Accepted	2023
10.	Dr. M. Mohanraj	Performance of direct expansion photovoltaic-thermal evaporator assisted compression heat pump water heaters using a zeotropic mixture. Solar Energy.	<i>Solar Energy</i>	Accepted	2024
11.	Dr. M. Mohanraj	Performance investigation on flat plate solar water collector using a hybrid nano-enhanced phase	<i>Journal of Energy Storage</i>	(Accepted for Publication).	2024

		change material (PCM).			
12.	Dr. C. Nithyanandam	Design and Analysis of Tornado Strainer	Page 2 of 9 International Journal of Science, Engineering and Technology	Vol.11, No.8, pp-2348-2357	2023
13.	Dr. C. Nithyanandam	A Robotic Manipulator's Design and Performance Using in Casting Industry to Manage a Shell Adapter	Technoarete Journal	Vol.3, No.2	2023
14.	Dr. V. Senthil Murugan	A Robotic Manipulator's Design and Performance Using in Casting Industry to Manage a Shell Adapter	Technoarete Journal	Vol.3, No.2	2023
2022-2023					
1.	Dr. K. Siva	Design And Analysis of LDM Extrusion Head for Conventional 3d Printer	International Journal of Computer Science and Mechatronics	Vol. 8, No. 6, pp. 1-13	2022
2.	Dr. K. Siva	Design and Analysis of Tornado Strainer	International Journal of Science, Engineering and Technology	Vol.11, No.3,pp.1-9	2022
3.	Dr. K. Siva	Green Communications: A Review of the Current Situation	Springer Nature-Renewable Energy Optimization, Planning and Control Proceedings of ICRTE 2022	DOI: 10.1007/978-981-19-8963-6_5	2022
4.	Dr. K. Siva	ICEAT22467 - Design And Analysis of LDM	Organisation of Science and	Vol.1, No.179, pp.	2022

		Extrusion Head for Conventional 3D Printer	Innovative Engineering & Technology (OSIET)	1-5	
5.	Dr. M. Mohanraj	Energy, financial and environmental impact analysis of solar thermal heat pump systems using a direct expansion packed bed evaporator-collector.	Solar Energy	Vol.232, No.154, pp.-168	2022
6.	Dr. M. Mohanraj	Thermal performance, cost effectiveness and environment analysis of a heat pump assisted regenerative solar still using slack wick wax as heat storage material	Sustainable Energy Technologies And Assessments	DOI:10.1016/j.seta.2022.102090	2022
7.	Dr. M. Mohanraj	Effect of microwave sintering on the microstructure and tribological behaviour of Ti-3Al-2.5V-xWC composites	Tribology International	https://doi.org/10.1016/j.triboint.2022.107714	2022
8.	Dr. M. Mohanraj	Second law based thermodynamic analysis of crushed gravel sand and biomass evaporator assisted solar still.	Sustainable Energy Technology and Assessments	Vol.52, No.2, pp. 102160	2022
9.	Dr. M. Mohanraj	Influence of rotation speeds on microstructure and mechanical properties of welded joints of friction stir welded AA2014-T6/AA6061-T6 alloys.	Journal of Processes Mechanical Engineering.	DOI:10.1177/09544089221077661	2022
10.	Dr. M. Mohanraj	Simulation of ground water quality for noyyal river basin of Coimbatore city, Tamilnadu using MODFLOW	Chemosphere	https://doi.org/10.1016/j.chemosphere.2022.135649	2022

11.	Dr. M. Mohanraj	Modelling of Urea Hydrolysis Kinetics using Genetic Algorithm coupled Artificial Neural Networks in Urease Immobilized Magnetite Nanoparticles	Chemosphere	Vol.303, No.1, pp. 134929	2022
12.	Dr. M. Mohanraj	Feasibility study on raw Simarouba glauca oil as an alternate fuel in a diesel engine and comparative assessment with its esterified oil	Fuel	Vol.327, pp.125168 - 125172	2022
13.	Dr. J. Manikandan	An Arduino Uno Controlled Fire Fighting Robot for Fires in Enclosed Spaces	IEEE Xplore - Proceedings of the Sixth International Conference on I-SMAC	Vol.978, No.8, pp.398 - 402	2022
14.	Dr. J. Manikandan	Machine Learning and Advanced Technology Based Patient Health Monitoring System	IEEE Xplore - Proceedings of the Sixth International Conference on I-SMAC	Vol.978, No.8, pp.996 - 999	2022
15.	Dr. J. Manikandan	Health Care Assistive System in Hospital for Doctor to View the Patient's Parameter in a Cloud Database using Light Fidelity	IEEE Xplore - Proceedings of the Sixth International Conference on I-SMAC	Vol.78, No.8, pp.264 - 267	2022
16.	Dr. J. Manikandan	Power Flow Analysis of Transient Stability in Microgrids used in Power Stations	IEEE Xplore - Proceedings of the Sixth International Conference on I-SMAC	Vol.978, No.8, pp.936 - 942	2022
17.	Dr. J. Manikandan	Deep Learning Features Restoration and Regional Longitudinal Fitting of Computed	IEEE Xplore - Proceedings of the Sixth International	Vol.978, No.8, pp.1000 - 1004	2022

		Tomography Images using Convolution Neural Network	Conference on I-SMAC		
18.	Dr. J. Manikandan	Artificial Intelligence and Advanced Technology based Bridge Safety Monitoring System	IEEE Xplore - Proceedings of the Sixth International Conference on I-SMAC	Vol.978, No.8, pp.631-634	2022
19.	Dr. J. Manikandan	Wind Energy System using Boost Converter with Three Phase Inverter	IEEE Xplore - Proceedings of the Sixth International Conference on I-SMAC	Vol.978, No.8, pp.860 - 863	2022
20.	Dr. J. Manikandan	Metal Oxide Semiconductor Nanostructures Surface Properties for Gas Sensing – A Review	IEEE Xplore - Proceedings of the Sixth International Conference on I-SMAC	Vol.978, No.8, pp.856 - 859	2022
21.	Dr. P. Jeyalakshmi	Feasibility study on raw Simarouba glauca oil as an alternate fuel in a diesel engine and comparative assessment with its esterified oil	Fuel	Vol.327, pp.125168 - 125172	2022
22.	Dr. S. Kannan	Environmentally Conscious Manufacturing and Life Cycle	Hindawi - Journal of Nanomaterials	https://doi.org/10.1155/2022/8438462	2022
23.	Dr. C. Nithyanandam	Design And Analysis of LDM Extrusion Head for Conventional 3d Printer	International Journal of Computer Science and Mechatronics	Vol.8, No.6, pp.1-13	2022
24.	Dr. C. Nithyanandam	Design and Analysis of Tornado Strainer	International Journal of Science, Engineering and	Vol.11, No.3, pp.1-9	2022

			Technology		
25.	Dr. C. Nithyanandam	Green Communications: A Review of the Current Situation	Springer Nature-Renewable Energy Optimization, Planning and Control Proceedings of ICRTE 2022	DOI: 10.1007/978-981-19-8963-6_5	2022
26.	Dr. C. Nithyanandam	ICEAT22467 - Design And Analysis of LDM Extrusion Head for Conventional 3D Printer	Organisation of Science and Innovative Engineering & Technology (OSIET)	Vol.1, No.179, pp. 1-5	2022
27.	Dr. V. Senthil Murugan	Energy performance of a compression refrigeration cycle using environment-friendly refrigerants	Materials Today: Proceedings	Vol.66, No.3, pp.1519-1525	2022
28.	Dr. V. Senthil Murugan	Design And Analysis of LDM Extrusion Head for Conventional 3d Printer	International Journal of Computer Science and Mechatronics	Vol.8, No.6, pp.1-13	2022
29.	Dr. V. Senthil Murugan	Green Communications: A Review of the Current Situation	Springer Nature-Renewable Energy Optimization, Planning and Control Proceedings of ICRTE 2022	DOI: 10.1007/978-981-19-8963-6_5	2022
30.	Dr. V. Senthil Murugan	ICEAT22467 - Design And Analysis of LDM Extrusion Head for Conventional 3D Printer	International Journal of Computer Science and Mechatronics	Vol.1, No.179, pp.1-5	2022
31.	Dr. Y. Ras Mathew	Design And Analysis of LDM Extrusion Head for	International Journal of	Vol.8, No.6, pp.1-13	2022

		Conventional 3d Printer	Computer Science and Mechatronics		
32.	Dr. Y. Ras Mathew	Green Communications: A Review of the Current Situation	Springer Nature-Renewable Energy Optimization, Planning and Control Proceedings of IC RTE 2022	DOI: 10.1007/978-981-19-8963-6_5	2022
33.	Mr. L. Karthick	CFD analysis of rotating diffuser in a SUV vehicle for improving thermal comfort	Materials Today: Proceedings	Vol.52, No.3, pp.1014 - 1025	2022
34.	Mr. L. Karthick	A comparison and analysis of mechanical properties of glass fiber and banana fiber composite	Materials Today: Proceedings	Vol.52, No.3, pp.398 - 402	2022
35.	Mr. L. Karthick	Vehicle safety system for two wheeler – A critical review	Materials Today: Proceedings	Vol.52, No.3, pp.1594 - 1597	2022
36.	Mr. L. Karthick	Influence of Nano-/Microfiller Addition on Mechanical and Morphological Performance of Kenaf/Glass Fibre-Reinforced Hybrid Composites	Journal of Nano Materials (HINDAWI)	https://doi.org/10.1155/2022/9778224	2022
37.	Mr. L. Karthick	Heat Index Based Optimisation of Primary Process Parameters in Friction Stir Welding on Light Weight Materials	Advances in Material Science & Engineering (HINDAWI)	https://doi.org/10.1155/2022/2494750	2022
38.	Mr. L. Karthick	Energy performance of a compression refrigeration cycle using environment-friendly refrigerants	Materials Today: Proceedings	Vol.66, No.3, pp.1519-1525	2022

39.	Mr. K. Rameshkumar	CFD analysis of rotating diffuser in a SUV vehicle for improving thermal comfort	Materials Today: Proceedings	Vol.52, No.3, pp.1014 - 1025	2022
40.	Mr. K. Rameshkumar	Carburization Effect on Mechanical Properties of EN-12 Steel in Different Quenching Medium at Different Quenching Time Intervals	AIP Conference Proceedings	https://doi.org/10.1063/5.0132575	2022
41.	Mr. D. Prabhu	CFD analysis of rotating diffuser in a SUV vehicle for improving thermal comfort	Materials Today: Proceedings	Vol.52, No.3, pp. 1014 - 1025	2022
42.	Mr. C. A. Jagadish	CFD analysis of rotating diffuser in a SUV vehicle for improving thermal comfort	Materials Today: Proceedings	Vol.52, No.3, pp.1014 - 1025	2022
43.	Mr. C. A. Jagadish	Vehicle safety system for two wheeler – A critical review	Materials Today: Proceedings	Vol.52, No.3, pp.1594 - 1597	2022
44.	Mr. S. Sivakumar	A comparison and analysis of mechanical properties of glass fiber and banana fiber composite	Materials Today: Proceedings	Vol.52, No.3, pp.398 - 402	2022
45.	Mr. A. Sasikumar	A comparison and analysis of mechanical properties of glass fiber and banana fiber composite	Materials Today: Proceedings	Vol.52, No.3, pp.398 - 402	2022
46.	Mr. K. Sriharrish	Design And Analysis of LDM Extrusion Head for Conventional 3d Printer	International Journal of Computer Science and Mechatronics	Vol.8, No.6, pp.1-13	2022
47.	Mr. K. Sriharrish	Green Communications: A Review of the Current Situation	Springer Nature-Renewable Energy Optimization,	DOI: 10.1007/978-981-19-8963-6_5	2022

			Planning and Control Proceedings of ICRTE 2022		
48.	Mr. K. Sriharrish	ICEAT22467 - Design And Analysis of LDM Extrusion Head for Conventional 3D Printer	Organization of Science and Innovative Engineering & Technology (OSIET)	Vol.1, No.179, pp.1-5	2022
2021-2022					
1.	Dr. M. Mohanraj	Assessment of single slope solar still using block & disc magnets via productivity, economic, & enviro-economic perspectives : A comparative Study	Environmental Science and Pollution Research	DOI:10.1007/s11356-021-15565-z	2021
2.	Dr. M. Mohanraj	CFD modeling of a gravel coarse aggregate sensible heat storage assisted single slope solar still	Desalination and Water Treatment	DOI:10.5004/dwt.2021.26554	2021
3.	Dr. M. Mohanraj	Experimental assessments on R430A as an environment-friendly replacement to R134a in vehicle air conditioners	Journal of the Brazilian Society of Mechanical Sciences and Engineering	https://doi.org/10.1007/s40430-021-02873-1	2021
4.	Dr. M. Mohanraj	Experimental studies on direct expansion solar thermal heat pump systems using R430A as a substitute to R134a	Journal of Process Mechanical Engineering	DOI: 10.1177/09544089211020962	2021
5.	Dr. M. Mohanraj	Experimental studies on photovoltaic-thermal heat pump water heaters using variable frequency drive compressors	Sustainable Energy Technologies and Assessments	DOI:10.1016/j.seta.2021.101152	2021

6.	Dr.M.Mohanraj	Experimental thermodynamic performance analysis of semi-transparent photovoltaic-thermal hybrid collectors using nanofluids	Journal of Process Mechanical Engineering	DOI: 10.1177/09544089211013663	2021
7.	Dr. M. Mohanraj	Grain size refinement, texture analysis & effect on the tensile properties of a novel Inconel 718	Materials Letters	DOI:10.1016/j.matlet.2021.129633	2021
8.	Dr. M. Mohanraj	Impact of third-grade nanofluid flow across a convective surface in the presence of inclined Lorentz force: an approach to entropy optimization	Journal of Thermal Analysis and Calorimetry	https://doi.org/10.1007/s10973-020-09751-3	2021
9.	Dr. M. Mohanraj	Performance analysis of crushed gravel sand heat storage & biomass evaporator-assisted single slope solar still	Environmental Science and Pollution Research	DOI:10.1007/s11356-021-15487-w	2021
10.	Dr. M. Mohanraj	Performance improvements of single slope solar stills using magnets and graphite plate fins.	Environmental Science and Pollution Research	Vol.28, No.16, pp.1-18	2021
11.	Dr. M. Mohanraj	Studies on adhesion strength and corrosion behaviour of ZnO-Mg coated on AISI 4140	Surfaces and Interfaces	DOI:10.1016/j.surfin.2021.100986	2021
12.	Dr. M. Mohanraj	Thermally Radiative Casson Fluid Flow over a Cylinder with Newtonian Heating and Heat generation/absorption	Journal of Physics - Conference Series	DOI:10.1088/1742-6596/1964/2/022001	2021
13.	Dr. M. Mohanraj	Thermodynamic analysis of single slope solar still using graphite plates and block	Water Science & Technology	DOI: 10.2166/wst.2021.156	2021

		magnets at seasonal climatic conditions			
14.	Dr. M. Mohanraj	Wetting phase transition of grain boundaries and material performance of novel Inconel 718	Materials Letters	https://doi.org/10.1016/j.matlet.2021.129858	2021
15.	Dr. M. Mohanraj	Performance & economic analysis of a heat pump water heater assisted regenerative solar still using latent heat storage	Applied Thermal Engineering	Vol.196, No.4, pp.117263	2021
16.	Dr. J. Manikandan	Evaluation of welding strength & optimization on seam welding of domex steel	Materials Today: Proceedings	https://doi.org/10.1016/j.matpr.2021.01.623	2021
17.	Dr. J. Manikandan	Over Feat Network Algorithm for Fabric Defect Detection in Textile Industry	Journal of Innovative Image Processing	Vol.9, No.4, pp.311 - 321	2021
18.	Dr. J. Manikandan	Improved Methodology of SVM to Classify Acoustic Signal by Spectral Centroid	Journal of Trends in Computer Science and Smart Technology	Vol.3, No.4, pp.294 - 304	2021
19.	Dr. J. Manikandan	Design of a Bottleneck Layered DNN Algorithm for Intrusion Detection System	IRO Journal on Sustainable Wireless Systems	Vol.3, No.4, pp.242 - 258	2021
20.	Dr. C. Nithyanandam	Optimization on Aircraft Landing Schedule Problems by Cuckoo Search Algorithm	Tierärztliche Praxis	Vol.41, pp.794 - 802	2021
21.	Dr. S. Kannan	Effect of the Reinforcement Phase on Indentation Resistance and Damage Characterization of Glass/Epoxy Laminates Using Acoustic	Hindawi - Advances in Materials Science and Engineering	https://doi.org/10.1155/2021/5768730	2021

		Emission Monitoring			
22.	Dr. V. Senthil Murgan	Assessment of single slope solar still using block & disc magnets via productivity, economic, & environmental perspectives : A comparative Study	Environmental Science and Pollution Research	DOI:10.1007/s11356-021-15565-z	2021
23.	Mr. S. Sivakumar	Growth, structural, and solid-state properties of a hybrid metal–organic crystal: tetramethylammonium cadmium nitrate	Journal of Thermal Analysis and Calorimetry	Vol.6, No.2, pp.1-5	2021
24.	Mr. S. Sivakumar	Modelling and analysis of an EN8 crankshaft in comparison with AISI 4130 crankshaft material	Materials Today: Proceedings	Vol.52, No.3, pp.1036 - 1040	2021
25.	Mr. L. Karthik	Numerical analysis of Modified tooth in Spur Gear for increasing the performance using fool proofing technology	Materials Today: Proceedings	Vol.47, No.17, pp.5862 - 5868	2021
26.	Mr. L. Karthik	Performance & economic analysis of a heat pump water heater assisted regenerative solar still using latent heat storage	Applied Thermal Engineering	Vol.196, No.4, pp.117263	2021
27.	Mr. L. Karthik	Modelling and analysis of an EN8 crankshaft in comparison with AISI 4130 crankshaft material	Materials Today: Proceedings	Vol.52, No.3, pp.1036 - 1040	2021
28.	Mr. A. Sasikumar	Modelling and analysis of an EN8 crankshaft in comparison with AISI 4130 crankshaft material	Materials Today: Proceedings	Vol.52, No.3, pp.1036 - 1040	2021
29.	S. Vidya Prakash	Numerical analysis of Modified tooth in Spur	Materials Today:	Vol.47, No.17,	2021

		Gear for increasing the performance using fool proofing technology	Proceedings	pp.5862 - 5868	
30.	C. A. Jagadish	Numerical analysis of Modified tooth in Spur Gear for increasing the performance using fool proofing technology	Materials Today: Proceedings	Vol.47, No.17, pp.5862 - 5868	2021
31.	Mr. D. Amalraju	Physio Chemical and Mechanical Properties of Natural Cellulosic Water Hyacinth Fiber and Its Composites	Journal of Natural Fibers	https://doi.org/10.1080/15440478.2022.2025979	2021
2020-2021					
1.	Dr. K. Siva	Active Vibration Control of Rotating Machines	Solid State Technology	Vol.63, No.2, pp.1-13	2020
2.	Dr. K. Siva	Optimization of process parameters in friction stir welding of aluminium matrix sic-al ₂ o ₃ composites by genetic algorithm	Journal Of Ceramic Processing Research	Vol.21, No.2, pp. 57-163	2020
3.	Dr. M. Mohanraj	Energy, Economic and Enviro-economical (4E) analysis of a coarse aggregate sensible heat storage assisted single slope solar still.	Journal of Thermal Analysis and Calorimetry	Vol.11, pp.177-181	2020
4.	Dr. M. Mohanraj	Environment friendly refrigerant options for automobile air conditioners – A review	Journal of Thermal Analysis and Calorimetry	https://doi.org/10.1007/s10973-020-10286-w	2020
5.	Dr. M. Mohanraj	Experimental investigations of reciprocating wear behaviour of metal matrix (Ti/TiB) composites	Archives of Civil and Mechanical Engineering	Vol.180, No.3, pp.25-35	2020
6.	Dr. M. Mohanraj	Experimental investigations on jet impingement solar air	Journal of Processes Mechanical	Vol.1, No.574	2020

		heaters using pin-fin absorber plate.	Engineering		
7.	Dr. M. Mohanraj	Monitoring the neural network modelling of wear behaviour of Ti-6Al-4V reinforced with nano B4C particle	Materials Today: proceedings	DOI: 10.1016/j.matpr.2020.10.921	2020
8.	Dr. M. Mohanraj	Optimization on performance of coarse aggregate assisted single slope solar still via Tagchi approach.	Journal of Renewable Energy and Environment	Vol.8, No.1, pp.13-19	2020
9.	Dr. M. Mohanraj	Photovoltaic-thermal collector assisted heat pumps using environment-friendly refrigerants.	Proceedings of the Institution of Mechanical Engineers Part E Journal of Process Mechanical Engineering	DOI:10.1177/0954408920947366	2020
10.	Dr. M. Mohanraj	Thermal analysis of photovoltaic-thermal collectors - A review	Journal of Thermal Analysis & Calorimetry	DOI:10.1007/s10973-020-09431-2	2020
11.	Dr. C. Nithyanandam	Elephnat Herding Algoritthm to confine the discipline cost of Aircraft Landing Schedule	International Journal of Creative Research Thoughts	Vol.8, No.4, pp.374-382	2020
12.	Dr. C. Nithyanandam	Investigations on air deliver landing plan utilizing Genetic Algorithm(GA) and Opposition based GA with Cauchy Mutation (OGACM) and correlations of Punishment cost	Test Engineering & Management	Vol.83, No.3, pp.25224-25234	2020
13.	Dr. C. Nithyanandam	Research on aircraft landing schedule using opposition-based	Int. J. Business Intelligence	Vol.16, No.1, pp.89-106	2020

		genetic algorithm with Cauchy mutation	and Data Mining, Inderscience Publishers		
14.	Dr. S. Kannan	Surface Roughness Assessment Based on Digital Image Texture Analysis of CFRP Composites Machined by Swirling Abrasives	Journal of Engineering Science & Technology	Vol.15, No.5, pp.3388-3403	2020
15.	Dr. Y. Ras Mathew	Shape modification of automatic actuated fire Sprinkler (AAFS) made up of NiTiNol spring	Journal of the Balkan Tribological Association	Accepted for Publication	2020
16.	Mr. K. R. Sakthivel	Investigations on LM6 Aluminum Alloy CO ₂ - Sand Moulds	Journal of the Balkan Tribological Association	Vol.26, No.2, pp.401-415	2020