



**DEPARTMENT OF AUTOMOBILE ENGINEERING**

**FACULTY JOURNAL PUBLICATIONS**

S.No	Name of the Faculty	Title of the Paper	Name of the Journal	Volume/Issue/ Page No.	Publisher	Month and Year
1	Dr.T.Mothilal	Effect of Silicon Coupling Grafted Ferric Oxide and E-Glass Fibre in Thermal Stability, Wear and Tensile Fatigue Behaviour of Epoxy Hybrid Composite	Silicon	Vol.No.12, Issue.11, pp.2533–2544	Springer	Dec 2019
2	Dr.T.Mothilal	Heat transfer analysis of thermoelectric generator at the focus of solar parabolic dish	Journal of Xi'an University of Architecture & Technology	Vol.No.12/ Issue.5, pp.275–281	-	May 2020
3	Dr.T.Mothilal	Performance of solar parabolic dish thermoelectric generator with PCM	Materials Today: Proceedings	Vol.No.37/Issue .2/pp.929-933	ELSEVIER	Nov 2020
4	Dr.T.Mothilal	Thermal and flexural properties of Caryota urens palm fiber-reinforced polyester composites	A Journal Of Composition Theory	Vol.No.13/ Issue.1/pp.301-312	-	Jan 2020

5	Dr.T. Mothilal Mr.S.Mathavan	Emission characteristics study of Gasoline-Diesel and Gasoline-Diesel/pentanol blend	IOP Conference Series: Materials Science and Engineering	Vol.No.988, Article ID-012050, 8-pages	-	July 2020
6	Dr.T.Mothilal Mr.S.Mathavan	Analysis on mechanical properties of wood plastic composite	AIP Conference Proceedings	Article ID 2283, 020037	-	Oct 2020
7	Dr.T.Mothilal Mr.S.Mathavan	Performance and emission characteristics of diesel blended with sweet lime peel oil and corncorn oil	AIP Conference Proceedings	Article ID 2283, 020036	-	Oct 2020
8	Mr.S.Mathavan Dr.T.Mothilal	Experimental Investigation on Emission Characteristics of Diesel N- Pentanol Blend in Homogeneous Charged Compression Ignition Engine	International Journal of Vehicle Structures & Systems	Vol.No.13/ Issue.3/pp.309-313	-	Aug 2021
9	Dr.T.Mothilal	Mechanically toughened EMI shielding natural rubber composite in microwave frequency bands	Plastics, Rubber and Composites	Vol.No.50 /Issue.5/pp.241-248	Taylor & Francis	Feb 2021
10	Dr.T.Mothilal	Experimental investigation on physical properties of banana/E glass fiber reinforced hybrid interpenetrating polymer network composites	Materials Today: Proceedings	Vol.No.45/ Issue.6/ pp.5029-5033	ELSEVIER	Feb 2021
11	Mr.VA.Shridhar	A Comparative Study with J48 and Random Tree Classifier for Predicting the State of Hydraulic Braking System through Vibration	SAE Technical papers	Article ID-2021-28-0254	-	Aug 2021

12	Dr.V.Dillibabu	Investigation of Biomass Gasification Simulation Using Air, Steam and Oxygen As Gasifying Agent	Thermal Science	Vol.26, No.6B, pp.5109-5119	Vinca Institute of Nuclear Sciences	Aug 2022
13	Dr.V.Dillibabu	Investigation Of Gasification Reactions and H <sub>2</sub> /CO Ratio Analysis for Rice Husk Air Gasification Simulation	Thermal Science	Vol.27, No.1B, pp.881-890	Vinca Institute of Nuclear Sciences	Aug 2022
14	Mr.S.Mathavan	Comparative Analysis of NO <sub>x</sub> Emission Reduction in Engines Using NiCo <sub>2</sub> O <sub>4</sub> Nanoparticles without External Reductant at Low Temperatures: An Experimental Investigation	Journal of Nanomaterials	Article ID-8981350	Hindawi	Sep 2022
15	Dr.T.Mothilal	Effect of walnut powder reinforcement on the mechanical properties of biodegradable natural flax/hemp fibre-based composites	Materials Today: Proceedings	Vol.No.69/Part3/ pp.1387-1393	ELSEVIER	Sep 2022
16	Dr.T.Mothilal	Influence of nano titanium oxide reinforced Al-7075 matrix composites in stir casting method	Materials Today: Proceedings	Vol.No.69/Part3/ pp.1381-1386	ELSEVIER	Sep 2022
17	Mr.S.Mathavan	Experimental Analysis for Nitrogen Oxide Reduction in a Diesel Engine by the Hydrogen-Assisted Selective Catalytic Reduction Technique	Advances in Materials Science and Engineering	Volume 2023, Article ID 8686871, 7 pages	Hindawi	Jan 2023

18	Dr.T.Mothilal	Three-point bending and ILSS of high lamina bamboo fibre and polyester resin composite	Materials Today: Proceedings	Published online	ELSEVIER	Mar 2023
19	Dr.T.Mothilal	Evaluation of Mechanical Behaviour of Multiwalled Nanotubes Reinforcement Particles in Jute-Glass Fibres Hybrid Composites	Advances in Materials Science and Engineering	Volume 2023, Article ID 2219460, 7 pages	Hindawi	Apr 2023
20	Dr.T.Mothilal	Mechanical Characterization of Friction-Stir-Welded Aluminum AA7010 Alloy with TiC Nanofiber	Advances in Materials Science and Engineering	Volume 2023, Article ID 1466963, 7 pages	Hindawi	Apr 2023
21	Dr.T.Mothilal	Experimental Analysis of Al-SiC-TiB <sub>2</sub> hybrid metal matrix composite	AIP Conference Proceedings	International	AIP	10 Sep 2023
22	Dr.T.Mothilal	Mechanical and wear properties of 7075 Al reinforced with graphite particulate metal matrix composites: preparation and evaluation	AIP Conference Proceedings	International	AIP	10 Sep 2023
23	Dr.V.Dillibabu	Effect of operating condition on permanent magnet heating system	Lecture Notes in Mechanical Engineering "Recent Advances in Mechanical Engineering"	International	NA	21 July 2023
24	Mr.Balamurugan R	Design and Investigation of Automatic Trash Collecting Machine for Industry	Smart Industry – SAE International	ISSN: 0148-7191, e-ISSN: 2688-3627 DOI: <a href="https://doi.org/10.4271/2023-28-0179">https://doi.org/10.4271/2023-28-0179</a>	SAE International	10 Nov 2023
25	Mr.Balamurugan R	Design and Analysis of Retrofit for Root Crop Harvester	Smart Agriculture SAE International	ISSN: 0148-7191, e-ISSN: 2688-3627 <a href="https://doi.org/10.4271/2023-28-0052">https://doi.org/10.4271/2023-28-0052</a>	SAE International	10 Nov 2023

26	Mr.Balamurugan R	Design,ModellingandSimulation ofAdaptable Marine and Terrestrial Cleaner	Simulationand Design - SAE International	ISSN: 0148-7191, e-ISSN: 2688-3627 DOI: <a href="https://doi.org/10.4271/2023-28-0165">https://doi.org/10.4271/2023-28-0165</a>	SAE International	10Nov 2023
27	Mr.Balamurugan R	Application of Taguchi Based ANFIS Approach in Wire Electrical DischargeMachiningofHasteAlloy C276 for Automobile Applications	Electrical Discharge SAE International	ISSN: 0148-7191, e-ISSN: 2688-3627 DOI: <a href="https://doi.org/10.4271/2023-28-0167">https://doi.org/10.4271/2023-28-0167</a>	SAE International	10Nov 2023
28	Dr.A.Arivazhagan	$H_{\infty}$ Static Output-Feedback Control withVariableSubstitutionScheme for Non-Stationary Running Active Suspension Vehicle	International Journal of Vehicle Structures & Systems	ISSN0975-3060	MechAero Foundation forTechnical Researchand Education Excellence (MAFTREE)	Dec 2023
29	Dr.A.Arivazhagan	PerformanceEvaluationofPassive Suspension System by Varying Damping Coefficient	International Journal of Vehicle Structures & Systems	ISSN0975-3060	MAFTREE	Dec 2023
30	Dr.A.Arivazhagan	Design and Development of Power GenerationusingVehicleSuspension	International Journal of Vehicle Structures & Systems	ISSN0975-3060	MAFTREE	Dec 2023
31	Dr.V.Dillibabu	Anti-TheftVehicleTrackingand Remote-Control System	International Journal of Vehicle Structures & Systems	ISSN0975-3060	MAFTREE	Dec 2023

32	Dr.T.Mothilal	Evaluation of Lightweight Cotton Textiles for Durable and Comfortable Automotive Interior Applications.	SAEMOBILUS	ISSN:0148-7191	SAE International	Feb 2024
33	Mr.R Balamurugan	Optimization of the microelectrochemical drilling response variable of Inconel 718 alloy by grey relational analysis	Materials Today Proceedings	Published online	ELSEVIER	April 2024
34	Dr.T. Mothilal	A Comparative Analysis of ANN and Taguchi for Enhancing Predictive modelling and optimisation for Al-Base Metal Matrix Composites reinforced with nanoparticles of SiC	International Conference on Recent Advances in Waste Minimization & Utilization-2024 (RAWMU-2024)	Volume 556, 2024	Web of Conferences	August 2024
35	Dr.T. Mothilal	Optimizing Surface Roughness in Turning of Al7072 with Nano particles of Carbon Metal Matrix Composite using Taguchi Analysis and ANN Prediction	International Conference on Recent Advances in Waste Minimization & Utilization-2024 (RAWMU-2024)	Volume 556, 2024	Web of Conferences	August 2024
36	Mr.R Balamurugan	Performance Analysis of conventional two wheeler versus plug in hybrid Electric two wheeler for light goods Transportation	SAE International	2025-28-0199	SAE International	July 2025
37	Mr.R Balamurugan	Design and Fabrication of Automated Yarn Spool Handling System	AIP Conference Proceedings	3204, 020014 (2025)	AIP Conference Proceedings	February 2025
38	Dr.T. Mothilal	Optimized Energy Management in Renewable Energy Integrated Microgrids Using Pyramidal Dilation Attention Convolutional Neural Networks	Journal of Environmental Nanotechnology	Vol. 14(1), 444-452 (2025)	Institute for Environmental Nanotechnology	March 2025

39	Dr.A. Arivazhagan	Experimental Investigation on Genetic Algorithm Optimized Proportional Integral Derivative Based Active Suspension System	SAE International	2025-01-0014	SAE International	May 2025
40	Dr.V.Dillibabu	Surface Roughness Classification Using Attention-Guided Convolutional Neural Networks on Real-Time Machining Sensor Data	Proceedings of the <b>2025 International Conference on Recent Innovation in Science, Engineering and Technology (ICRISET)</b>	979-8-3315-5833-8	Institute of Electrical and Electronics Engineers	August 2025
41	Dr.V.Dillibabu	AI-Driven Real-Time Monitoring and Prediction Framework for Surface Degradation and Corrosion Resistance Assessment	Proceedings of the <b>2025 International Conference on Recent Innovation in Science, Engineering and Technology (ICRISET)</b>	79-8-3315-5833-8	Institute of Electrical and Electronics Engineers	August 2025
42	Dr.V.Dillibabu	AI-Enabled Multiscale Feature Fusion for Accurate Biocompatibility Evaluation in Smart Tissue Engineering Applications	Proceedings of the <b>2025 International Conference on Recent Innovation in Science, Engineering and Technology (ICRISET)</b>	979-8-3315-5833-8	Institute of Electrical and Electronics Engineers	August 2025
43	Dr P Jagan	Machine learning–assisted multi-objective optimisation of A premixed-assisted CI engine fueled with CITRUS-derived biofuels 10.1016/j.applthermaleng.2026.130673	<b>Applied Thermal Engineering – Q1, Impact Factor: 6.9</b>	Volume: 296 Page Number: 130673	ELSEVIER	March 2026