

Dr. Mahalingam College of Engineering and Technology, Pollachi – 642003

Department of Automobile Engineering

Journal Publications Summary

Academic year	No. of Publications
2023-2024	16
2022-2023	11
2021-2022	15
2020-2021	14

Academic Year: 2023-2024

S. No.	Authors	Title of the Paper	Name of the Journal	Volume No., Issue No., and ISSN number	Month & Year of Publication
1	D. Shanmugam P. Jeyaraj R. Thirumurugan R. Sam S. Phuvi R. Aswathaman	Effect of alkali treatment on properties of Palmyra palm tree primary flower leaf stalk fiber-reinforced polymer composites	Biomass Conversion and Biorefinery	ISSN: 2190-6823	Sep-23
2	M. Selvakumar D. Nathan T. Ramkumar V. Vignesh kumar P. Narayanasamy	Printing high-strength high-elongation Al4043 alloy using UNS A94043 welding wires through wire-arc additive manufacturing	Journal of Materials Engineering and Performance	ISSN: 1059-9495	Sep-23
3	M. Selvakumar R. Bharathiraja T. Ramkumar	Studies on the thermal characteristics of nano-enhanced paraffin wax phase change material (PCM) for thermal storage applications	Journal of Energy Storage	Volume 73, ISSN. 2352-1538	Oct-23
4	S. Deepan Kumar R. Vishnu Ramesh Kumar D. Dinesh Kumar R. Manojkumar A. Tamilselvan M. Boopathi C. Lokesh	Design and Thermal Analysis of Battery Thermal Management System for EV	SAE Technical Papers	ISSN. 0148-7191	Nov-23
5	Sivasubramanian Palanisamy, Mayandi Kalimuthu, Shanmugam Dharmalingam, Azeez Alavudeen, Rajini Nagarajan, Faruq Mohammad HamadA Al- Lohedan	Effects of fiber loadings and lengths on mechanical properties of Sansevieria Cylindrica fiber reinforced natural rubber biocomposites	Materials Research Express	ISSN: 2053-1591	Aug-23

6	R Bharathiraja, T Ramkumar, M Selvakumar, N Radhika	Thermal characteristics enhancement of Paraffin Wax Phase Change Material (PCM) for thermal storage applications	Renewable Energy	Volume 222, ISSN: 0960-1481	Jan-24
7	L. Natrayan S.K.Ashok Seeniappan Kaliappan Pankaj Kumar	Effect of Stacking Sequence on Mechanical Properties of Bamboo/Bagasse Composite Fiber for Automobile Seat Cushions and Upholstery Application	SAE Technical Papers	ISSN: 0148-7191	Jan-24
8	M Murugan, G Selvakumar, T Ramkumar, M Selvakumar	Experimental Investigation on the Microstructure and Mechanical Properties of DSS2205 and SS304L Dissimilar Weldments	Surface Review and Letters	ISSN: 0218-625X	Jan-24
9	K Hariharan, M Selvakumar, T Ramkumar, P Chandramohan	Cell viability and bioactive coating on additive manufactured polycaprolactone substrate for osteointegration applications	Chemical Physics Impact	Volume 8, ISSN:26 67-0224	Jan-24
10	M. Thirunavukkarasu S. Kumar, R. Sakthivel, V. Rathinavelu, M. Mohan Prasad	Feature of SiO ₂ concentration on solar thermal functional characteristics of flat plate solar collector	Thermal Science	Vol 28 ISSN: 0354 - 9836	Jan-24
11	M.Thirunavukkarasu, K.Selvaraj, C.Chiranjeevi, V.Rathinavelu, L.Phaneendra maguluri,	Enhancement and experimental study on thermal behaviour of heat pipe based solar absorber by using copper oxide nanofluid	Thermal Science	Vol 28 ISSN: 0354 - 9836	Jan-24
12	M.Thirunavukkarasu, T. Sathish, N. Ahalya, T.S. Senthil , Zakir Hussain, Md Irfanul Siddiqui, Hitesh Panchal	A comprehensive review on the novel approaches using nanomaterials for the remediation of soil and water pollution	Alexandria Engineering Journal	Vol 86 ISSN: 1110-0168	Jan-24

13	Rama Thirumurugan, M Padmanaban, T Ramkumar D Shanmugam	Investigation of mechanical and tribological behavior of Al-Ni-Co-MWCNT composites prepared by powder metallurgy technique	Journal of Process Mechanical Engineering	ISSN:0954-4089	April-24
14	M Selvakumar, T Ramkumar	Microstructure, high temperature wear and corrosion behaviors of UNS R56320-xWC composite fabricated through powder metallurgy	Journal of Materials Engineering and Performance	ISSN:1059-9495	April-24
15	M Selvakumar, T Ramkumar, P Chandramohan	Crack free Hard Facing Operations for orifice plate used in Oil Refinery applications	Journal of Process Mechanical Engineering	ISSN:0954-4089	April-24
16	T Kasirajan, M Selvakumar, T Ramkumar, M Mohanraj	Thermal and Mechanical characterisation of friction stir welded dissimilar Aluminum alloys	Journal of Process Mechanical Engineering	ISSN:0954-4089	April-24

Academic Year: 2022-2023

S.No	Authors	Title of the Paper	Name of the Journal	Volume No., Issue No., and ISSN number	Month & Year of Publication
1	M. Selvakumar P. Muthusamy M. Mohanraj T. Ramkumar	Effect of microwave sintering on the microstructure and tribological behavior of Ti-3Al-2.5 V-xWC composite	Tribology International	Volume 174, ISSN 0301679X	October 2022
2	D. Shanmugam P. Jeyaraj R. Thirumurugan	Investigation of static and dynamic mechanical properties of CPFLSF and PPLSF reinforced polyester hybrid composites	Biomass Conversion and Biorefinery	Volume 12, Issue 10, ISSN 2190-6823	October 2022
3	T. Ramkumar K. Hariharan M. Selvakumar M. Jayaraj	Effect of Various Surface Modifications on Characterization of New Natural Cellulosic Fiber from Coconut Tree Secondary Flower Leaf Stalk Fiber (CSF)	Journal of Natural Fibers	Volume 19 Issue 16 Pages 13362-13375	Nov 2022
4	M. Thirunavukkarasu V. Lakshminarayanan A. Suganya	A Novel Model of Patient's Health Monitoring System Using IoT Platform	Neuro Quantology	Volume 20 Issue 9 Page 5505-5511 eISSN 1303-5150	October 2022
5	M. Thirunavukkarasu V. Lakshminarayanan C.G. Saravanan A. Suganya	Smart Vehicle Parking Fee Collection System Using IoT	Periodico Di Mineralogia	Volume 91, No. 5, 2022 ISSN: 0369-8963	October 2022
6	S.K.Ashok S.Ponni alias Sathya	A fuzzy model to predict the mechanical characteristics of friction stir welded joints of aluminum alloy AA2014-T6	The Aeronautical Journal	ISSN: 2059-6464	Dec-22

7	S. Arulkumar N. Praveenkumar S. Deepan Kumar V. Sivananth A. Tamilselvan S. Boobalan	Experimental Investigation on the Tensile and Wear Characteristics of Journal Bearing Materials Used in Automobile Engine Application	SAE Technical paper	ISSN: 0148-7191	Oct-22
8	S. Arulkumar S. Deepan Kumar R. Karthik N. Boopalan S. Boobalan	Experimental Investigation on the Wear and Tear Characteristics of Chrome and Moly Coated Piston Rings Used in Automobile Engine Application	SAE Technical paper	ISSN: 0148-7191	Oct-22
9	T Ramkumar M Selvakumar	Evaluation on Properties of Composite Materials Containing Caryota Fiber (CF) For Wall Roof Applications	Biomass Conversion and Biorefinery	ISSN: 2190-6823	Nov-22
10	M. Jayaraj, Rama Thirumurugan D. Shanmugam	Investigation of Static and Dynamic Mechanical Properties of Coconut Tree Primary Flower Leaf Stalk Fiber Reinforced Polymer Composites	Journal Of Natural Fibers	2023, VOL. 20, NO. 1, 2166645 1544-0478	JAN-2023
11	R. Vishnu Ramesh Kumar	Effects of emission and performance characteristics study of rubber seed biodiesel fueled DI diesel engine fumigated with methanol	Materials Today: Proceedings	Online ISSN: 2214-7853	April-2023

Academic Year: 2021-2022

S.No.	Authors	Title of the Paper	Name of the Journal	Volume No., Issue No., and ISSN number	Month & Year of Publication
1	M. Selvakumar T. Ramkumar R. Narayanan M. Mohanraj	Grain size refinement, texture analysis and effect on the tensile properties of novel Inconel 718 alloys	Materials letters	Volume 292, Article 129633 ISSN 0167-577X	01 June 2021
2	S. Arulkumar P. Karuppusamy K. Lingadurai V. Sivananth	A Study on Mechanical Properties of Tungsten Carbide and Reinforced Magnesium Metal Matrix Composites for application of Piston	International Journal of Lightweight Materials and Manufacture	Volume 4, Issue 4, Pages 449-459 ISSN 2588-8404	10 July 2021
3	M. Selvakumar T. Ramkumar R. Narayanan M. Mohanraj	Wetting phase transition of grain boundaries and material performance of novel Inconel 718	Materials Letters	Volume 295, Article 129858 ISSN 0167-577X	15 July 2021
4	D Shanmugam Rama Thirumurugan M Thiruchitrabalam B Maheshkumard	Experimental characterization of surface modified Palmyra Palm Leaf Stalk Fiber (PPLSF) /polymer composites– Mechanical, Crystallinity and Acoustic properties	Journal of Natural Fibers	ISSN 1544046X, 15440478	25 August 2021
5	N. Praveenkumar S. Arulkumar D. Sadhasivam N. Boopalan S. Praveenkumar	Design and Analysis of Muffler for Engine Exhaust Noise and Heat Reduction	SAE Technical Paper	Technical Paper 2021-28-0128 ISSN: 0148-7191, e-ISSN: 2688-3627	15 Sep 2021

6	N. Praveenkumar D. Sadhasivam N. Boopalan R. Manojkumar G E Kithiyon Joshva J Sahaya Jufert Roy	An investigation on Corrosion and Wear Behaviour of Automotive Materials	SAE Technical Paper	Technical Paper 2021- 28-0238 ISSN: 0148- 7191, e-ISSN: 2688-3627	01 October 2021
7	D. Shanmugam P. Sivasubramanian M. Kalimuthu R. Nagarajan Carlo Santulli Faruq Mohammad	Tensile Properties and Fracture Morphology of Acacia Caesia Bark Fibers Treated with Different Alkali Concentrations	Journal of Natural Fibers	ISSN 1544- 046X	02 February 2022
8	Calvin Sophistus King	Flow Learning Experience in Online Learning by Integrated Course Design	First Monday	ISSN 1396- 0466	07 February 2022
9	T Ramkumar A Haiter Lenin M Selva Kumar M Mohanraj S Christopher Ezhil M Muruganandam	Influence of rotation speeds on microstructure and mechanical properties of welded joints of friction stir welded AA2014-T6/AA6061-T6 alloys	Proceeding s of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering	ISSN: 0954- 4089	March 2022
10	D. Shanmugam P. Sivasubramanian M. Kalimuthu Alavudeen Azeez P. Murugesan R. Nagarajan Carlo Santulli	Wear Properties and Post-Moisture Absorption Mechanical Behavior of Kenaf/Banana Fiber Reinforced Epoxy Composites	Fibers	Volume 10 Issue4 ISSN 2079- 6439	02 April 2022
11	S Kathiresan G Sathi B Narendhiran M Selvakumar T Surulivelrajan	Computational simulation of titanium alloy grade-4 subjected to severe plastic deformation with the aid of finite elements	AIP Conference Proceeding s	Volume 2393 Issue 1	May 2022

12	B Narendhiran M Selvakumar T Surulivelrajan S Kathiresan G Sathi	Performance enhancement in SI engine by air-fuel mixture recirculating system	AIP Conference Proceedings	Volume 2393 Issue 1	May 2022
13	T Surulivelrajan, S Kathiresan, G Sathi, B Narendhiran, M Selvakumar	Experimental and numerical analysis of cooling tower efficiency using forced draft	AIP Conference Proceedings	Volume 2393 Issue 1	May 2022
14	M Selvakumar T Surulivelrajan S Kathiresan G Sathi B Narendhiran	Experimental investigation on friction stir processing of AA6082	AIP Conference Proceedings	Volume 2393 Issue 1	May 2022
15	G Sathi B Narendhiran M Selvakumar T Surulivelrajan S Kathiresan	Optimized muffler design for less pollution engines	AIP Conference Proceedings	Volume 2393 Issue 1	May 2022

Academic Year: 2020-2021

S.No.	Authors	Title of the Paper	Name of the Journal	Volume No., Issue No., and ISSN number	Month & Year of Publication
1	Syed Aalam C Thirunavukkarasu M	Mitigation of Exhaust Emission from CRDI Diesel Engine through Post Fuel Injection Strategy with the use of Central Composite Design	Research Journal of Chemistry and Environment	Vol. 24 Special Issue. I, 2020 111-115 ISSN 0972-0626	10 July 2020
2	Shanmugam D Kumar, Vignesh Thirumurugan Rama	Investigation on microstructural and mechanical properties of sub-zero processed AISI 440C steel	International Journal of Materials Research & DeGruyter	PP761-770 Volume 111, Issue 9 Sep 2020 ISSN 2195-8556	07 September 2020
3	M. Selvakumar T. Ramkumar M. Mohanraj P. Chandramohan, P. Narayanasamy	Microstructure and corrosion behavior of ZnO-Mg coating on AISI 4140 steel fabricated by spray coating	Journal of Materials Engineering and Performance	Volume 29, Issue 9, Pages 5796-5806 ISSN 1059-9495	14 September 2020
4	M.Thirunavukkarasu C. Nandakumar Vallinayagam Raman C.G. Saravananc M. Vikneswaran S.PrasannaRajYadav	Effect of Nozzle Hole Geometry on the Operation of Kapok Biodiesel in a Diesel Engine	FUEL - Elsevier	Vol. 276 pp. 114-118, 2020 ISSN 0016-2361 (print) 1873-7153 (web)	15 September 2020
5	M.Thiruchitrambalam M. Logesh D. Shanmugam M. Prabhahar S. Prakash	Aerodynamic Analysis of a Popular Automobile Model with Various Add-On Devices using Computational Fluid Dynamics.	International Journal of Vehicle Structures & Systems (IJVSS)	Vol. 12 Issue 4 487-491 ISSN: 0975-3060 (Print), 0975-3540 (Online)	01 October 2020
6	D. Shanmugam M.Thiruchitrambalam A.G. Suresh M. Prabhahar	Dynamic mechanical behavior and Fractography of Lyocell fabric-polyester composite	Materials Today: Proceedings	Volume 45, Part 7 Pages 6094-6098 2214-7853	08 October 2020

7	M. Selvakumar T. Ramkumar P. Chandrasekar M. Mohanraj R. Krishnasharma	Monitoring the neural network modelling of wear behaviour of Ti-6Al-4 V reinforced with nano B4C particle	Materials Today: Proceedings	Volume 41, Part 4, Pages 942-950 2214-7853	14 October 2020
8	Shanmugam D Rama Thiru Muruganrama Jayaraj M Shanmugasundaram	Investigation of Static and Dynamic Mechanical Properties of Short Palmyra Palm Leaf Stalk Fiber (PPLSF) Reinforced Polymer Composites	Journal of Natural Fibers	Electronic ISSN 1544-046X Print ISSN 1544-0478	23 November 2020
9	A Yazharasu T Rajagopal N Prasanna S Ajay K Aranganathan	Exergy analysis of forced convection solar flat plate collector using different working fluids	Materials Science and Engineering	1055 (2021) 012014 ISSN 1757-8981	01 January 2021
10	M Selvakumar T Ramkumar M Mohanraj AP Senthilkumar P Narayanasamy	Effect of deposition thickness on microstructure and thermal behaviour of ZnO-Mg coated AISI 4140 for automotive applications	Journal of Process Mechanical Engineering	ISSN 0954-4089	05 January 2021
11	Vishnu Ramesh Kumar Aswathaman Sathiskumar Sureshkumar Dhavaneeswaran	Effects of gasoline fumigation on the performance and emission characteristics of CI engine fuelled with mahua biodiesel	AIP Conference Proceedings	Volume 2317, Issue 1 030014 (2021) ISSN 2158-3226	05 February 2021
12	M. Selvakumar J. D. Andrew Pon Abraham M. Mohanraj Arun K. Raj	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	Article number: 162 (2021) ISSN 1678-5878	24 February 2021

13	M Selvakumar S Ayyappan Muthukannan Karunaraja T Ram Kumar	Energy and exergy analyses of coconut drying in a solar tunnel drier	Journal of Process Mechanical Engineering , Sage publication	ISSN 0954- 4089	24 March 2021
14	Selvakumar Mani Ramkumar Thulasiram Mohanraj Murugesan Narayanasamy Pandiyaraj BalasundarPandiyaraj	Studies on adhesion strength and corrosion behavior of ZnO-Mg coated on AISI 4140	Journal of Surfaces and interfaces, Elsevier	23 Volume 23,, 100986 ISSN 2468- 0230	01 April 2021