

**Dr. Mahalingam College of Engineering and Technology**

**Pollachi-642003**

**Department of Automobile Engineering**

**Journal Publications Summary**

<b>Publications</b>	<b>Publications Type</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>
<b>Journal Article Publications</b>	<b>Q1</b>	1	1	2	2	2	2
	<b>SCIE</b>	1	7	7	6	5	5
	<b>Scopus / UGC</b>	0	1	4	6	2	2
	<b>Not Indexed</b>	2	0	0	0	0	0
	<b>Total (unique paper count)</b>	4	9	13	14	9	9

**Journal Publications**  
**Academic Year 2022-2023**

Name of the Authors	Title of the Paper	Name of the Journal	Volume No. Issue No. and Page No. / DOI No.	Month & Year of Publication
Mr.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	<a href="https://doi.org/10.1016/j.matpr.2023.03.611">https://doi.org/10.1016/j.matpr.2023.03.611</a>	April/ 2023
Dr.D.Shanmugam	Investigation of Static and Dynamic Mechanical Properties of Coconut Tree Primary Flower Leaf Stalk Fiber Reinforced Polymer Composites	Journal of Natural Fibers	Volume. 20, NO. 1, 2166645 1544-0478	Jan/ 2023
Dr.S.K.Ashok	A fuzzy model to predict the mechanical characteristics of friction stir welded joints of aluminium alloy AA2014-T6	The Aeronautical Journal	Volume 127 , Issue 1311 , pp. 818 - 830	Dec/ 2022
Dr. M.Selvakumar	Evaluation on Properties of Composite Materials Containing Caryota Fiber (CF) For Wall Roof Applications	Biomass Conversion and Biorefinery	<a href="https://doi.org/10.1007/s13399-022-03547-1">https://doi.org/10.1007/s13399-022-03547-1</a>	Nov/ 2022
Dr.D.Shanmugam	Investigation of static and dynamic mechanical properties of CPFLSF and PPLSF reinforced polyester hybrid composites	Biomass Conversion and Biorefinery	Volume. 20, NO. 1, 2166645	Oct/ 2022
Dr.M.Thirunavukkarasu	Smart Vehicle Parking Fee Collection System Using IoT	Periodico Di Mineralogia	Volume 91, No. 5, 2022	Oct/ 2022
Dr.M.Selvakumar	Effect of microwave sintering on the microstructure and tribological behaviour of Ti-3Al-2.5 V-x WC composite	Tribology International	Volume 174, 107714	July/ 2022
Dr.M.Selvakumar	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 (16), 13362-13375	Jun/ 2022
Dr.D.Shanmugam	Experimental investigation on the mechanical, thermal and acoustic characteristics of cellulose/synthetic fiber/nano clay hybrid composites: Influence of treatment, moisture and layering pattern	Composites Part A: Applied Science and Manufacturing	Volume 168, 107497	May/ 2023

**Papers Published in Journals**

<b>S.No.</b>	<b>Name of the Authors</b>	<b>Title of the Paper</b>	<b>Name of the Journal</b>	<b>Volume No., Issue No. and Page(s) No.</b>	<b>Year of Publication</b>
<b>Academic year 2021-22</b>					
1	Dr.M.Selvakumar	Grain size refinement, texture analysis and effect on the tensile properties of novel Inconel 718 alloys	Materials letters	Volume 292, Article 129633	01-06-2021
2	Dr.M.Selvakumar	Artificial Intelligence in Mechanical and Industrial Engineering	Artificial intelligence-based optimization of wear behavior parameters of sintered titanium grade 5 reinforced with nano B4C particles	Edition-1st Edition First Published-2021 Imprint-CRC Press Pages-9, Chapter 12	20-06-2021
3	Mr.S.Arulkumar	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	10-07-2021
4	Dr.M.Selvakumar	Wetting phase transition of grain boundaries and material performance of novel Inconel 718	Materials Letters	Volume 295, Article129858	15-07-2021
5	Dr.D.Shanmugam	Experimental characterization of surface modified Palmyra Palm Leaf Stalk Fiber (PPLSF) /polymer composites– Mechanical, Crystallinity and Acoustic properties	Journal of Natural Fibers	Journal of Natural Fibers	25-08-2021
6	Mr.S.Arulkumar Mr.N.Praveenkumar	Design and Analysis of Muffler for Engine Exhaust Noise and Heat Reduction	SAE Technical Paper	Technical Paper 2021-28-0128	15-09-2021
7	Mr.N.Praveenkumar	An investigation on Corrosion and Wear Behaviour of Automotive Materials	SAE Technical Paper	Technical Paper 2021-28-0238	01-10-2021
8	Dr.D.Shanmugam	Tensile Properties and Fracture Morphology of Acacia Cassia Bark Fibers Treated with Different Alkali Concentrations	Journal of Natural Fibers	Journal of Natural Fibers	02-02-2022
9	Calvin Sophistus King	Flow Learning Experience in Online Learning by Integrated Course Design	First Monday	First Monday	07-02-2022

10	Dr.D.Shanmugam	Wear Properties and Post-Moisture Absorption Mechanical Behavior of Kenaf/Banana Fiber Reinforced Epoxy Composites	Fibers	Volume 10 Issue 4	02-04-2022
11	Dr.M.Selvakumar	Advances in Sustainable Machining and Manufacturing Processes	Machining and Vibration Behavior of Ti-TiB Composites Processed through Powder Metallurgy Techniques	Chapter 2, 9 pages	19-05-2022

### Academic year 2020-21

1	Mr.M.Thirunavukkarasu	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	Research Journal of Chemistry and Environment	2020-21
2	Dr.D.Shanmugam	Investigation on microstructural and mechanical properties of sub-zero processed AISI 440C steel	International Journal of Materials Research&De Gruyter	International Journal of Materials Research&De Gruyter	2020-21
3	Dr.M.Selvakumar	Microstructure and corrosion behavior of ZnO-Mg coating on AISI 4140 steel fabricated by spray coating	Journal of Materials Engineering and Performance	Journal of Materials Engineering and Performance	2020-21
4	Mr.M.Thirunavukkarasu	Effect of Nozzle Hole Geometry on the Operation of Kapok Biodiesel in a Diesel Engine	FUEL - Elsevier	FUEL - Elsevier	2020-21
5	Dr.D.Shanmugam	Aerodynamic Analysis of a Popular Automobile Model with Various Add-On Devices using Computational Fluid Dynamics.	International Journal of Vehicle Structures & Systems (IJVSS)	International Journal of Vehicle Structures & Systems (IJVSS)	2020-21
6	Dr.D.Shanmugam	Dynamic mechanical behavior and Fractography of Lyocell fabric-polyester composite	Materials Today: Proceedings	Materials Today: Proceedings	2020-21
7	Dr.M.Selvakumar	Monitoring the neural network modelling of wear behaviour of Ti-6Al-4 V reinforced with nano B4C particle	Materials Today: Proceedings	Materials Today: Proceedings	2020-21
8	Dr.D.Shanmugam	Investigation of Static and Dynamic Mechanical Properties of Short Palmyra Palm Leaf Stalk Fiber (PPLSF) Reinforced Polymer Composites	Journal of Natural Fibers & Taylor and Francis	Journal of Natural Fibers & Taylor and Francis	2020-21
9	Mr.A.Yazharasu	Exergy analysis of forced convection solar flat plate collector using different working fluids	Materials Science and Engineering	Materials Science and Engineering	2020-21

10	Dr.M.Selvakumar	Monitoring the neural network modelling of wear behaviour of Ti-6Al-4 V reinforced with nano B4C particle	Materials Today: Proceedings	Materials Today: Proceedings	2020-21
11	Dr.M.Selvakumar	Effect of deposition thickness on microstructure and thermal behaviour of ZnO-Mg coated AISI 4140 for automotive applications	Journal of Process Mechanical Engineering, Sage publication	Journal of Process Mechanical Engineering, Sage publication	2020-21
12	Mr.R.Vishnurameshkumar Mr.R.Aswathaman	Effects of gasoline fumigation on the performance and emission characteristics of CI engine fuelled with mahua biodiesel	American Institute of Physics-Publishing	American Institute of Physics-Publishing	2020-21
13	Dr.M.Selvakumar	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	Journal of the Brazilian Society of Mechanical Sciences and Engineering	2020-21
14	Dr.M.Selvakumar	Energy and exergy analyses of coconut drying in a solar tunnel drier	Journal of Process Mechanical Engineering, Sage publication	Journal of Process Mechanical Engineering, Sage publication	2020-21
15	Dr.M.Selvakumar	Studies on adhesion strength and corrosion behavior of ZnO-Mg coated on AISI 4140	Journal of Surface and interfaces, Elsevier	Journal of Surface and interfaces, Elsevier	2020-21
16	Dr.M.Selvakumar	Grain size refinement, texture analysis and effect on the tensile properties of novel Inconel 718 alloys	Materials letters, Elsevier	Materials letters, Elsevier	2020-21

### Academic Year (2019-2020)

1	Mr.P.Karuppusamy	Wear and corrosion behaviour of titanium carbide reinforced metal matrix composites for automobile brake disc application	Lecture Notes in Mechanical Engineering	Advances in Materials and Metallurgy pp 185-197	2019-2020
2	Dr.M.Selva Kumar	Effect of TiB Addition on Corrosion Behavior of Titanium Composites under Neutral Chloride	Transactions of the Indian Ceramic Society	vol. 78, no. 3, pp. 1-6 (2019)	2019-2020
3	Dr.M.Selva Kumar	Experimental investigation of dry turning of AISI 1040 steel with TiN coated insert	Engineering Research Express	1 (2019) 025038	2019-2020

4	Mr.Radhakrishnan	Characteristics of bio-oil from continuous fast pyrolysis of Prosopis juliflora	Energy	Volume 190, 1 January 2020, 116387	2019-2020
5	Dr. D. Shanmugam	Characterization of New Natural Cellulosic Fiber from Coconut Tree Primary Flower Leaf Stalk Fiber (CPFLSF)	Journal of Natural Fibers	2019, Pages 1-13	2019-2020
6	Mr.P.Karuppusamy	Effects of T4 and T6 Heat Treatments on the Wear Behaviour of WC-Reinforced Mg Alloy Matrix Composite	Trans Indian Inst Met	Accepted	2019-2020
7	Dr.M.Selva Kumar	Experimental investigations of reciprocating wear behavior of metal matrix (Ti/TiB) composites	Archives of Civil and Mechanical Engineering	Accepted	2019-2020

#### Academic Year (2018-2019)

1	Dr.Karthick Jayaram	Optimizing the process parameters plasma arc cutting using Taguchi approach for the case industry in Fiji	Materials Today: Proceedings, Elsevier	Materials Today: Proceedings 2018	2018-2019
2	Dr.M.Selva Kumar	Rietveld refinement of powder X-ray diffraction, microstructural and mechanical studies of magnesium matrix composites processed by	Journal of Magnesium and Alloys-Elsevier publications	Volume 6, Issue 4, December 2018, Pages	2018-2019
3	Mr.S.K.Ashok	Effect of Post Weld Heat Treatment and Welding Parameters on Mechanical and Corrosion Characteristics of Friction Stir Welded Aluminum	Transactions of the Canadian Society for Mechanical Engineering	2019, 43(2): 230-236	2018-2019
4	Dr.M.Selva Kumar	Experimental investigation and analysis of drilling parameters of metal matrix (Ti/TiB) composites	Journal of the Brazilian Society of Mechanical Sciences and Engineering	Accepted	2018-2019
5	Dr.M.Selva Kumar	Effect of b4c reinforcement on the dry sliding wear behaviour of ti-6al-4v/b4c sintered composites using response surface methodology	Archives of Metallurgy and Materials	63 (2018), 3, 1179-1200	2018-2019
6	Dr.M.Selva Kumar	Effect of B4C in Ti-6Al-4V matrix on workability behavior of powder metallurgy composites during cold upsetting	International Journal of Materials Research	Volume 109, Issue 12 (December 2018)	2018-2019

7	Mr.P.Karuppusamy	Study the Role of WC Reinforcement and Deep Cryogenic Treatment on AZ91 MMNC Wear Behavior Using Multilevel Factorial Design	Journal of Tribology - ASME Publication	2019, 141(4): 041608 (11 pages)	2018-2019
8	Mr.P.Karuppusamy	Influence of Cryogenic Treatment on As-Cast AZ91+1.5 wt%WC Mg-MMNC Wear Performance	Advances in Materials and Metallurgy	Select Proceedings of ICEMMM 2018, pp 185-197	2018-2019
9	Dr.M.Selva Kumar	Investigation on microstructural, mechanical and thermal evolution during friction stir welding of dissimilar aluminium alloys	Transactions of the Canadian Society for Mechanical Engineering	Volume 0, Number ja	2018-2019
10	M.Thirunavukkarasu	Synthesis and characterization of gaseous fuel from Jatropha oil through catalytic reactor and its performance in DI diesel	Journal of Thermal Analysis and Calorimetry	Vol136 Number1 136:305–315	2018-2019
11	Mr.Radhakrishnan	Surfactant determines the morphology, structure and energy storage features of CuO nanostructures	Results in Physics	Volume 13, June 2019, 102185	2018-19

<b>Academic Year (2017-2018)</b>					
1	Dr.M.Selva Kumar	Studies on the structural property, mechanical relationships and corrosion behaviour of Inconel 718 and SS 316L dissimilar joints by TIG	Journal of Manufacturing Processes	Volume 30, December 2017, Pages 290-298	2017-2018
2	Dr. R.Saravanan,	Helical Spring Design Optimization in Dynamic Environment Based on Nature Inspired Algorithms	International Journal of Theoretical and Applied Mechanics	Volume 12, Number 4 (2017) pp. 709-739	2017-2018
3	Dr. R. Saravanan	Advanced helical gear reducer design optimization through nature inspired algorithms	World Scientific News International Scientific Journal	77(2) (2017) 267-280	2017-2018
<b>Academic Year (2016-2017)</b>					
1	M.Thirunavukkarasu	Production and Characterization of Catalytically Cracked Biofuel in DI Diesel Engine	IJRET - International research journal of engineering and technology	Volume: 4 Issue: 03	2016-2017
2	S.Gokulakannan	A review on Wear Behaviour of clutch plate made of PEEK Composite Material	Journal of Science and Technology (JST)	Volume 2, Issue 3, (JST/02030617)	2016-2017
3	RagupathyKaru	Optimization of combustion bowl geometry for the operation of grape seed oil methyl ester – diesel mixes in a stationary diesel engine	Journal of Advances in chemistry	Volume 13, Number 2, pp. 5948-5957, I	2016-2017
4	P. Ravi Kumar, Dr.B. Giriraj, Dr.A.P. Senthil Kumar Dr.D. Shanmugam	Static Mechanical Properties of Polyester Transfer Moulded Jute/Carbon Fibre Reinforced Hybrid Polyester Composites	International Journal of Printing, Packaging & Allied Sciences	Vol. 4, No. 2, pp 1273-1280	2016
5	M.Thirunavukkarasu R Ravindran	Production of gaseous fuel from jatropha oil by cerium oxide based catalytic fuel reactor and its utilisation on diesel engine	Thermal science	Vol. 20, Suppl. 4, pp. S1127-S1135	2016
6	Manjunathan.M, Vivek.T, Sathishkumar.S	Performance of AlbiziaSaman Oil Blend In Ci Engine	International Journal of Innovative Research in Science, Engineering and Technology	Vol. 5, Issue 8, 14606-14616	2016