



**K.RAMAKRISHNAN COLLEGE OF ENGINEERING**  
**(Autonomous)**

SAMAYAPURAM, TIRUCHIRAPPALLI – 621 112  
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**DEPARTMENT OF MECHANICAL ENGINEERING**

**LIST OF PUBLICATIONS DURING THE ACADEMIC YEAR 2021-2022**

**Number of Scopus Indexed Journals : 19**

Sl No	Title of the paper	Name of the author	Title of the Journal	Volume & Issue
1	Parametric analysis and simulation of surface roughness and tool flank wear in machining of low carbon alloy steel	M.Ravichandran	Materials Today: Proceedings	In press
2	Physical and mechanical properties of AA2219/BN composites	M.Ravichandran	Materials Today: Proceedings	In press
3	Influence of heat storage materials in a concentrated solar absorber for space heating	M.Ravichandran	Materials Today: Proceedings	In press
4	Experimental investigations on properties of MoS <sub>2</sub> and TiB <sub>2</sub> reinforced aluminium composites	M.Ravichandran	Materials Today: Proceedings	In press
5	Evaluation of mechanical properties on kenaf fiber reinforced granite nano filler particulates hybrid polymer composite	M.Ravichandran	Materials Today: Proceedings	In press
6	Investigation of machining attributes on machining of alloys under nano fluid MQL environment: A review	M.Ravichandran	Materials Today: Proceedings	In press
7	Optimization of forces of feed, cutting and thrust based contribution parameters in machining with cutting fluid	M.Ravichandran	Journal of Physics: Conference Series	2027
8	Wear properties of waste silk fibre reinforced PLA bio composites using taguchi technique	M.Ravichandran	Journal of Physics: Conference Series	2027
9	Mechanical and water absorption behaviour of palm seed particles based hybrid bio-composites	M.Ravichandran	Journal of Physics: Conference Series	2027

10	Mechanical properties of waste silk fibre reinforced PLA bio composites manufactured through hand layup method	M.Ravichandran	Journal of Physics: Conference Series	2027
11	Tensile and impact strength of alpaca fiber epoxy matrix hybrid composites prepared by injection moulding process	M.Ravichandran	Journal of Physics: Conference Series	2027
12	Optimization on end milling operating parameters for super alloy of Inconel 617 by Taguchi's L27 orthogonal array	M.Ravichandran	Journal of Physics: Conference Series	2027
13	Mechanical Properties of AlN and Molybdenum disulfide reinforced Aluminium Alloy Matrix Composites	M.Ravichandran	Journal of Physics: Conference Series	2027
14	Investigations on compressive strength of titanium diboride and graphite reinforced Magnesium Matrix Composites	M.Ravichandran	Journal of Physics: Conference Series	2027
15	Evaluation of mechanical strength of the stir casted aluminium Metal matrix composites (AMMCs) using Taguchi method	Mohana Krishnan, A	Materials Today: Proceedings	In press
16	Salt spray corrosion study on aluminium metal matrix composites (AMMCs) prepared by powder metallurgy route	Mohana Krishnan, A	Materials Today: Proceedings	In press
17	Influence of stir casting parameters in mechanical strength analysis of Aluminium Metal Matrix Composites (AMMCs)	Mohana Krishnan, A	Materials Today: Proceedings	In press
18	Tribological studies of glass filled Nylon 6 composites in self-mated contacts and against AISI D2 steel disc	Jafrey Daniel James D	Materials Today: Proceedings	44&1
19	Friction stir welding of glass filled Nylon 6 composite sheets using double step shoulder tool	Jafrey Daniel James D	Materials Today: Proceedings	44&1



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**LIST OF PUBLICATIONS DURING THE ACADEMIC YEAR 2021-2022**

**Number of SCI Journals : 32**

Sl.No	Title of the paper	Name of the author	Title of the Journal	Volume & Issue
1	Wear behavior of hydroxyapatite reinforced polymer composite for biomedical applications	D.Srinivasan	Surface Topography: Metrology and Properties	doi.org/10.1088/205-672X/ac43
2	Boosted microwave absorption properties of CoFe <sub>2</sub> O <sub>4</sub> with extraordinary 3D morphologies	M.Ravichandran	Ceramics International	48 &10
3	Experimental Investigations on Effect of Silicon Carbide on Microstructure and Mechanical Properties in Mg-3 wt% Al Alloy Matrix Using Powder Metallurgy	M.Ravichandran	Silicon	doi.org/10.1007/s12633-022-01834-0
4	Removing microplastics from wastewater using leading-edge treatment technologies: a solution to microplastic pollution—a review	M.Ravichandran	Bioprocess and Biosystems Engineering	doi.org/10.1007/s00449-022-02715-x
5	Microstructure, mechanical and wear properties of boron carbide reinforced nickel alloy composites processed by bottom pouring type stir casting process	M.Ravichandran	Surface Topography: Metrology and Properties	doi.org/10.1088/205-672X/ac5ae5
6	Optimization of tribological process parameters of titanium carbide reinforced copper matrix composites	M.Ravichandran	Proceedings of the Institution of Mechanical Engineers, Part	doi.org/10.1177/13506501221085055
7	Features of hybrid laser-arc welding of GTD-111 superalloy compared to laser beam welding	M.Ravichandran	Materials Letters	309
8	Investigating Influences of Synthesizing Eco-Friendly Waste-Coir-Fiber Nanofiller-Based Ramie and Abaca Natural Fiber Composite Parameters on Mechanical Properties	M.Ravichandran	Bioinorganic Chemistry and Applications	2022

9	Investigation on Inorganic Salts $K_2TiF_6$ and $KBF_4$ to Develop Nanoparticles Based $TiB_2$ Reinforcement Aluminium Composites	M.Ravichandran	Bioinorganic Chemistry and Applications	2022
10	Mechanical and Durability Studies on Ficus exasperata Leaf Ash Concrete	M.Ravichandran	Advances in Civil Engineering	2022
11	Microstructural Analysis and Mechanical Behaviour of Copper CDA 101/AISI-SAE 1010 Dissimilar Metal Welds Processed by Friction Stir Welding	M.Ravichandran	Materials Research	25
12	Investigation of Weight Fraction and Alkaline Treatment on Catechu Linnaeus/Hibiscus cannabinus/Sansevieria Ehrenbergii Plant Fibers-Reinforced Epoxy Hybrid Composites	M.Ravichandran	Advances in Materials Science and Engineering	2022
13	Electrochemical corrosion and tribological behaviour of AA6063/ $Si_3N_4$ /Cu ( $NO_3$ ) <sub>2</sub> composite processed using single-pass ECAPA route with 120° die angle	M.Ravichandran	Journal of Materials Research and Technology	16
14	The investigation of the effect of nano particles on dry sliding wear and corrosion behavior of Al-Mg/ $Al_2O_3$ composites	M.Ravichandran	Surface Topography: Metrology and Properties	9&4
15	Enhancement of Mechanical Properties on Novel Friction Stir Welded Al-Mg-Zn Alloy Joints Reinforced with Nano-SiC Particles	M.Ravichandran	Journal of Nanomaterials	2021
16	Influence of Nanographite on Dry Sliding Wear Behaviour of Novel Encapsulated Squeeze Cast Al-Cu-Mg Metal Matrix Composite Using Artificial Neural Network	M.Ravichandran	Journal of Nanomaterials	2021
17	Finite element analysis of temperature distribution and stress behavior of squeeze pressure composites	M.Ravichandran	Advances in Materials Science and Engineering	2021
18	Sustainable development of carbon nanocomposites: synthesis and classification for environmental remediation	M.Ravichandran	Journal of Nanomaterials	2021
19	Wire Electrical Discharge Machining Characteristics of Al-4.4 Mg-0.7 Mn-0.15 Cr-12 wt.% $MoO_3$ Composites Using Taguchi Technique	M.Meignanamoorthy	Advances in Materials Science and Engineering	2022

20	Effect of Nanoaluminium Nitride Ceramic Particles on Microstructure, Mechanical Wear, and Machining Behavior of Al-Si-Mg Alloy Matrix Composites Produced by Bottom Pouring Type Stir Casting Route	M.Meignanamoorthy	Journal of Nanomaterials	2022
21	Microstructure, mechanical and wear behavior of LM24/SiC/MoS <sub>2</sub> hybrid composites produced via liquid metallurgy process	M.Meignanamoorthy	Surface Topography: Metrology and Properties	10 & 1
22	Synthesis and Optimization of Deesterified Acacia-Alginate Nanohydrogel for Amethopterin Delivery	S Sivananthan	Bioinorganic Chemistry and Applications	2022
23	Experimental Investigation on Tribological Behaviour of AA6066: HSS-Cu Hybrid Composite in Dry Sliding Condition	S Sivananthan	Advances in Materials Science and Engineering	2022
24	Investigation on Mechanical and Wear Behaviors of LM6 Aluminium Alloy-Based Hybrid Metal Matrix Composites Using Stir Casting Process	S Sivananthan	Advances in Materials Science and Engineering	2022
25	Optimizing the characteristics of the laser hard facing process parameters to maximize the wear resistance of Ni-based hard-faced deposits using the RSM technique	S Sivananthan	Advances in Materials Science and Engineering	2022
26	Effect of sucrose catalyst in the catalytic converter on performance and emission of spark ignition engine	M Sridharan	Journal of Thermal Science and Engineering Applications	14&4
27	Optimization of gasoline engine operating parameters fueled with DIPE-gasoline blend: Comparative evaluation between response surface methodology and fuzzy logic expert system	M Sridharan	Process Safety and Environmental Protection	158
28	Application of CFD and ANN in predicting the flow nature of flue gas in the catalytic converter	M Sridharan	Journal of Scientific and Industrial Research	81&1

29	Machinability Analysis and Optimization of Electrical Discharge Machining in AA6061-T6/15wt.% SiC Composite by the Multi-criteria Decision-Making Approach	D Jafrey Daniel James	Journal of Materials Engineering and Performance	doi.org/10. 1007/s116 65-021- 06511-8
30	The Effects of Stacking Sequence on the Mechanical and Water Absorption Properties of Areca-Pineapple Fiber-based Epoxy Composites	D Jafrey Daniel James	Journal of Natural Fibers	doi.org/10. 1080/1544 0478.2021 .1990183
31	Improvement on the machinability characteristics of AA6061-T6/15 wt.% SiC composites by Response Surface methodology	D Jafrey Daniel James	Surface Topography: Metrology and Properties	9 & 3
32	Investigation of the surface roughness of aluminium composite in the drilling process.	Mohana Krishnan, A	Materials Physics & Mechanics	47&5