Senthilkumar N

List of Publications by Year
in descending order

55 papers	1,281 citations	331670 21 h-index	414414 32 g-index
57 all docs	57 docs citations	57 times ranked	623 citing authors

#	Article	IF	Citations
1	Experimental investigation and performance analysis of cemented carbide inserts of different geometries using Taguchi based grey relational analysis. Measurement: Journal of the International Measurement Confederation, 2014, 58, 520-536.	5.0	102
2	Taguchi's methodology of optimizing turning parameters over chip thickness ratio in machining P/M AMMC. SN Applied Sciences, 2019, 1, 1.	2.9	58
3	Multi-response optimization of dry sliding wear parameters of AA6026 using hybrid gray relational analysis coupled with response surface method. Measurement and Control, 2019, 52, 540-553.	1.8	56
4	Evaluation of Mechanical and Tribological Behavior of Al–4%Cu–x%SiC Composites Prepared Through Powder Metallurgy Technique. Transactions of the Indian Institute of Metals, 2017, 70, 1305-1315.	1.5	55
5	Remediation of heavy metal polluted waters using activated carbon from lignocellulosic biomass: An update of recent trends. Chemosphere, 2022, 302, 134825.	8.2	53
6	Synthesis and Characterization of Silicon Nitride Reinforced Al–Mg–Zn Alloy Composites. Metals and Materials International, 2021, 27, 3058-3069.	3.4	52
7	Biogas from food waste through anaerobic digestion: optimization with response surface methodology. Biomass Conversion and Biorefinery, 2021, 11, 227-239.	4.6	49
8	Optimization of cutting inserts geometry using DEFORM-3D: Numerical simulation and experimental validation. International Journal of Simulation Modelling, 2012, 11, 65-76.	1.3	43
9	Application of Response Surface Methodology and Firefly Algorithm for Optimizing Multiple Responses in Turning AISI 1045 Steel. Arabian Journal for Science and Engineering, 2014, 39, 8015-8030.	1.1	42
10	Influence of dimethoxymethane addition on performance, emission and combustion characteristics of the diesel engine. International Journal of Ambient Energy, 2017, 38, 622-626.	2.5	38
11	An investigation on microstructure and mechanical behaviour of copper-nickel coated carbon fibre reinforced aluminium composites. Materials Research Express, 2020, 7, 115701.	1.6	38
12	Implications of SiC/Al2O3 Reinforced Al-Mg-Zn Alloy Hybrid Nano Composites Using Vacuum Sintering Method. Silicon, 2021, 13, 3639-3647.	3.3	37
13	A comprehensive review on biodegradable polylactic acid polymer matrix composite material reinforced with synthetic and natural fibers. Materials Today: Proceedings, 2023, 80, 2829-2839.	1.8	32
14	Effect of Tool Geometry in Turning AISI 1045 Steel: Experimental Investigation and FEM Analysis. Arabian Journal for Science and Engineering, 2014, 39, 4963-4975.	1.1	31
15	Optimization and performance analysis of process parameters during anaerobic digestion of food waste using hybrid GRA-PCA technique. Journal of Renewable and Sustainable Energy, 2016, 8, .	2.0	30
16	Optimisation of machining and geometrical parameters in turning process using Taguchi method. Australian Journal of Mechanical Engineering, 2014, 12, 233-246.	2.1	29
17	Influence of process parameters on the microstructure and mechanical properties of friction stir welds of AA2014 and AA6063 aluminium alloys using response surface methodology. Materials Research Express, 2022, 9, 026528.	1.6	29
18	Machinability evaluation of Al–4%Cu–7.5%SiC metal matrix composite by Taguchi–Grey relational analysis and NSGA-II. Sadhana - Academy Proceedings in Engineering Sciences, 2016, 41, 1219-1234.	1.3	27

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19	Investigation and optimization of machining parameters influence on surface roughness in turning AISI 4340 steel. FME Transactions, 2020, 48, 383-390.	1.4	26
20	Optimization and Performance Analysis of Uncoated and Coated Carbide Inserts during Hard Turning AISI D2 Steel Using Hybrid GRA-PCA Technique. Applied Mechanics and Materials, 0, 852, 151-159.	0.2	25
21	Drilling Parameters Analysis on In-Situ Al/B4C/Mica Hybrid Composite and an Integrated Optimization Approach Using Fuzzy Model and Non-Dominated Sorting Genetic Algorithm. Metals, 2021, 11, 2060.	2.3	24
22	Effect of solid concentration on biogas production through anaerobic digestion of rapeseed oil cake. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2021, 43, 1329-1336.	2.3	22
23	A grey-fuzzy approach for optimizing machining parameters and the approach angle in turning AISI 1045 steel. Advances in Production Engineering and Management, 2015, 10, 195-208.	1.2	22
24	Prediction of Dry Sliding Wear Response of AlMg1SiCu/Silicon Carbide/Molybdenum Disulphide Hybrid Composites Using Adaptive Neuro-Fuzzy Inference System (ANFIS) and Response Surface Methodology (RSM). Arabian Journal for Science and Engineering, 2021, 46, 12045-12063.	3.0	21
25	A study on machinability evaluation of Al-Gr-B<SUB align="right">4C MMC using response surface methodology-based desirability analysis and artificial neural network technique. International Journal of Rapid Manufacturing, 2019, 8, 95.	0.5	20
26	Flank wear and surface roughness prediction in hard turning via artificial neural network and multiple regressions. Australian Journal of Mechanical Engineering, 2015, 13, 31-45.	2.1	19
27	Parametric Influence of Friction Stir Welding on Cast Al6061/20%SiC/2%MoS<sub>2</sub> MMC Mechanical Properties. Applied Mechanics and Materials, 0, 852, 297-303.	0.2	19
28	Cashew nut shell liquid as alternate fuel for CI engine—optimization approach for performance improvement. Biomass Conversion and Biorefinery, 2022, 12, 1715-1728.	4.6	19
29	Vibration and Damping Behavior of Si3N4 Reinforced Magnesium Alloy Composite for Structural Applications. Journal of New Materials for Electrochemical Systems, 2020, 23, 182-189.	0.6	19
30	Tensile and flexural behaviour of rice husk and sugarcane bagasse reinforced polyester composites. Materials Today: Proceedings, 2021, 46, 3451-3454.	1.8	18
31	Impact of Interface Temperature over Flank Wear in Hard Turning Using Carbide Inserts. Procedia Engineering, 2012, 38, 613-621.	1.2	17
32	Mode-1 fracture toughness analysis of coffee bean powder reinforced polymer composite. Materials Today: Proceedings, 2020, 21, 537-542.	1.8	16
33	An Accelerated Particle Swarm Optimization Algorithm on Parametric Optimization of WEDM of Die-Steel. Journal of the Institution of Engineers (India): Series C, 2015, 96, 49-56.	1.2	15
34	Sintering parameters consequence on microstructure and hardness of copper alloy prepared by powder metallurgy. Materials Today: Proceedings, 2023, 80, 2468-2473.	1.8	14
35	Surface modification of AZ61 magnesium alloy with nano-Al<SUB align="right">2O<SUB align="right">3 using laser cladding technique: optimisation of wear properties through hybrid GRA-PCA. International Journal of Rapid Manufacturing, 2019, 8, 221.	0.5	13
36	Optimising the wear performance of HVOF thermal spray coated Ti-6Al-4V alloy by grey relational approach. International Journal of Rapid Manufacturing, 2020, 9, 25.	0.5	13

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37	Ameliorating the Wear Defiance of HVOF Thermal Spray Silicon Carbide Coated Ti-6Al-4V Alloy Using PCA-GRA Technique. Silicon, 2022, 14, 3101-3117.	3.3	13
38	Experimental analysis and optimization on machining of coated carbon fiber and nanoclay reinforced aluminum hybrid composites. Carbon Letters, 2022, 32, 815-833.	5.9	13
39	Plasma Spray Coating of Aluminumâ€"Silicon-MWCNT Blends on Titanium Grade 5 Alloy Substrate for Enhanced Wear and Corrosion Resistance. Silicon, 2022, 14, 8629-8641.	3.3	12
40	Modification and Analysis of Compressor Intercooler Fin in Turbocharger Using FEM. Procedia Engineering, 2012, 38, 379-384.	1.2	10
41	Surface modification of AZ61 Magnesium Alloy with Nano TiO2/Al2O3 using Laser Cladding Technique. Materials Today: Proceedings, 2020, 21, 717-721.	1.8	10
42	An ANN approach for predicting the cutting inserts performances of different geometries in hard turning. Advances in Production Engineering and Management, 2013, , 231-241.	1.2	10
43	Comparative Investigation on Mechanical Properties of Natural Fiber Reinforced Polyester Composites. Applied Mechanics and Materials, 0, 592-594, 92-96.	0.2	8
44	Sliding-friction wear of a seashell particulate reinforced polymer matrix composite: modeling and optimization through RSM and Grey Wolf optimizer. Transactions of the Canadian Society for Mechanical Engineering, 2022, 46, 329-345.	0.8	8
45	Experimental investigation of sliding wear behaviour of boron carbide and mica reinforced aluminium alloy hybrid metal matrix composites using Box-Behnken design. Materials Today: Proceedings, 2021, 44, 3803-3810.	1.8	7
46	Effect of temperature on biogas production from food waste through anaerobic digestion. , 0, 85, 68-72.		7
47	Enhancement of energy storage capacity in lithium polymer batteries incorporated with zirconium oxide nano powders. Materials Today: Proceedings, 2021, 37, 1313-1319.	1.8	5
48	A study on machinability evaluation of Al-Gr-B<SUB align="right">4C MMC using response surface methodology-based desirability analysis and artificial neural network technique. International Journal of Rapid Manufacturing, 2019, 8, 95.	0.5	5
49	Abrasive wear and corrosion behavior of hybrid AMMCS reinforced with solid lubricant and ceramic particulates. AIP Conference Proceedings, 2022, , .	0.4	5
50	A critical evaluation of additive blended cashew nut shell liquid blended biodiesel performance in compression ignition engine. Environment, Development and Sustainability, 2023, 25, 61-75.	5.0	4
51	A study on effect of primary and secondary reinforcements in hybrid metal matrix composite. AIP Conference Proceedings, 2022, , .	0.4	3
52	A critical appraisal in smart material fabrication for smart systems. , 2019, , .		2
53	A Finite Element Simulation Study on Effects of Variation in Machining and Geometrical Parameters in Turning. Applied Mechanics and Materials, 0, 592-594, 3-7.	0.2	1
54	Surface modification of AZ61 magnesium alloy with nano-Al<SUB align="right">2O<SUB align="right">3 using laser cladding technique: optimisation of wear properties through hybrid GRA-PCA. International Journal of Rapid Manufacturing, 2019, 8, 221.	0.5	1

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55	Investigations of Micro-Milling Parameters in Woven Banana Fibre Reinforced Polymer Composite Filled with Rice Bran Particles. International Journal of Vehicle Structures and Systems, 2020, 12, .	0.2	1