

# Sonagiri Suresh

## List of Publications by Year in descending order

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60  
papers

1,568  
citations

361413

20  
h-index

330143

37  
g-index

60  
all docs

60  
docs citations

60  
times ranked

1159  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical behavior and wear prediction of stir cast Al-TiB <sub>2</sub> composites using response surface methodology. <i>Materials &amp; Design</i> , 2014, 59, 383-396.	5.1	164
2	Process Development in Stir Casting and Investigation on Microstructures and Wear Behavior of TiB <sub>2</sub> on Al6061 MMC. <i>Procedia Engineering</i> , 2013, 64, 1183-1190.	1.2	109
3	Aluminium-Titanium Diboride (Al-TiB <sub>2</sub> ) Metal Matrix Composites: Challenges and Opportunities. <i>Procedia Engineering</i> , 2012, 38, 89-97.	1.2	102
4	Effect of graphite addition on mechanical behavior of Al6061/TiB <sub>2</sub> hybrid composite using acoustic emission. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 612, 16-27.	5.6	85
5	Tribological and surface behavior of silicon carbide reinforced aluminum matrix nanocomposite. <i>Surfaces and Interfaces</i> , 2017, 8, 127-136.	3.0	64
6	Efficient Flame Detection Based on Static and Dynamic Texture Analysis in Forest Fire Detection. <i>Fire Technology</i> , 2018, 54, 255-288.	3.0	63
7	Development of silane grafted ZnO core shell nanoparticles loaded diglycidyl epoxy nanocomposites film for antimicrobial applications. <i>Materials Science and Engineering C</i> , 2016, 64, 286-292.	7.3	62
8	Mechanical Properties and Tribological Behavior of Al6061-SiC-Gr Self-Lubricating Hybrid Nanocomposites. <i>Transactions of the Indian Institute of Metals</i> , 2018, 71, 1897-1911.	1.5	62
9	Processing and characterization of mechanical and wear behavior of Al7075 reinforced with B <sub>4</sub> C and nano graphene hybrid composite. <i>Materials Research Express</i> , 2019, 6, 1265c5.	1.6	57
10	Multi Feature Analysis of Smoke in YUV Color Space for Early Forest Fire Detection. <i>Fire Technology</i> , 2016, 52, 1319-1342.	3.0	53
11	Surface characteristics and wear depth profile of the TiN, TiAlN and AlCrN coated stainless steel in dry sliding wear condition. <i>Surfaces and Interfaces</i> , 2017, 6, 1-10.	3.0	46
12	Mechanical behavior and failure analysis using online acoustic emission on nano-graphite reinforced Al6061-TiB <sub>2</sub> hybrid composite using powder metallurgy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 632, 1-13.	5.6	41
13	Sustainable friction stir spot welding of 6061-T6 aluminium alloy using improved non-dominated sorting teaching learning algorithm. <i>Journal of Materials Research and Technology</i> , 2020, 9, 11650-11674.	5.8	41
14	Mechanical and wear behavior of Al 7075/Al <sub>2</sub> O <sub>3</sub> /SiC/mg metal matrix nanocomposite by liquid state process. <i>Advanced Composites and Hybrid Materials</i> , 2019, 2, 530-539.	21.1	39
15	Mechanical Properties of AA 7075/Al <sub>2</sub> O <sub>3</sub> /SiC Nano-metal Matrix Composites by Stir-Casting Method. <i>Journal of the Institution of Engineers (India): Series D</i> , 2019, 100, 43-53.	1.0	32
16	Influence of SiC Nanoparticle Reinforcement on FSS Welded 6061-T6 Aluminum Alloy. <i>Journal of Nanomaterials</i> , 2018, 2018, 1-11.	2.7	29
17	Spectral investigations to the effect of bulk and nano ZnO on peanut plant leaves. <i>Karbala International Journal of Modern Science</i> , 2016, 2, 69-77.	1.0	27
18	Performance Analysis of Nano Silicon Carbide Reinforced Swept Friction Stir Spot Weld Joint in AA6061-T6 Alloy. <i>Silicon</i> , 2021, 13, 3399-3412.	3.3	26

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19	Optimization of transesterification of biodiesel using green catalyst derived from Albizia Lebbeck Pods by mixture design. <i>Renewable Energy</i> , 2017, 104, 185-196.	8.9	25
20	Investigation on Industrial Waste Eco-Friendly Natural Fiber-Reinforced Polymer Composites. <i>Journal of Bio- and Tribo-Corrosion</i> , 2020, 6, 1.	2.6	25
21	Wear behaviour of Al 7075/SiC/Mg metal matrix nano composite by liquid state process. <i>Advanced Composites and Hybrid Materials</i> , 2018, 1, 819-825.	21.1	24
22	Experimental investigation on mechanical properties of Al 7075/Al <sub>2</sub> O <sub>3</sub> /Mg NMMCâ€™s by stir casting method. <i>Sadhana - Academy Proceedings in Engineering Sciences</i> , 2019, 44, 1.	1.3	22
23	Tribological Behavior of Al 7075/SiC Metal Matrix Nano-composite by Stir Casting Method. <i>Journal of the Institution of Engineers (India): Series D</i> , 2019, 100, 97-103.	1.0	21
24	Effect of B <sub>4</sub> C on strength coefficient, cold deformation and work hardening exponent characteristics of Mg composites. <i>Journal of Magnesium and Alloys</i> , 2022, 10, 1381-1400.	11.9	21
25	Characterization, formability, various stresses and failure analysis on workability of sintered Mg-5%B <sub>4</sub> C composite under triaxial stress state condition. <i>Journal of Alloys and Compounds</i> , 2018, 747, 324-339.	5.5	20
26	Influence of tool rotational speed on the properties of friction stir spot welded AA7075-T6/Al <sub>2</sub> O <sub>3</sub> composite joint. <i>Materials Today: Proceedings</i> , 2020, 27, 62-67.	1.8	20
27	Investigation of the Thermal and Dielectric Behavior of Epoxy Nano-Hybrids by using Silane Modified Nano-ZnO. <i>Silicon</i> , 2018, 10, 1291-1303.	3.3	19
28	Evaluating weld properties of conventional and swept friction stir spot welded 6061-T6 aluminium alloy. <i>Materials Express</i> , 2019, 9, 851-860.	0.5	19
29	Investigation of biodegradable hybrid composites: effect of fibers on tribo-mechanical characteristics. <i>Advanced Composites and Hybrid Materials</i> , 2020, 3, 194-204.	21.1	18
30	Investigation on mechanical, wear, and machining characteristics of Al 7075/MWCNTs using the liquid state method. <i>Advanced Composites and Hybrid Materials</i> , 2020, 3, 243-254.	21.1	17
31	Investigation of Mechanical and Tribological Properties of Red Mud-Reinforced Particulate Polymer Composite. <i>Journal of Bio- and Tribo-Corrosion</i> , 2019, 5, 1.	2.6	14
32	Mechanical and Wear Characterization of Al/Nano-SiC NMMCs by Liquid State Process. <i>Journal of Bio- and Tribo-Corrosion</i> , 2019, 5, 1.	2.6	14
33	Corrosion Behaviour of Al 7075/Al <sub>2</sub> O <sub>3</sub> /SiC MMNCs by Weight Loss Method. <i>Journal of Bio- and Tribo-Corrosion</i> , 2018, 4, 1.	2.6	13
34	Characterization, wear surface roughness and tensile failure analysis of Al7075-TiC-MoS <sub>2</sub> hybrid composites using online acoustic emission. <i>Materials Research Express</i> , 2019, 6, 066544.	1.6	13
35	Investigation of bio-waste natural fiberâ€™reinforced polymer hybrid composite: effect on mechanical and tribological characteristics of biodegradable composites. <i>Mechanics of Soft Materials</i> , 2019, 1, 1.	0.9	13
36	Experimental Study on Abrasive Flow Machining (AFM): New Approach for Investigation on Nano-SiC in the Improvement of Material Removal and Surface Finishing. <i>Journal of Bio- and Tribo-Corrosion</i> , 2020, 6, 1.	2.6	13

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37	Application of Taguchi and Response Surface Methodology (RSM) in Steel Turning Process to Improve Surface Roughness and Material Removal Rate. <i>Materials Today: Proceedings</i> , 2018, 5, 24622-24631.	1.8	12
38	Mechanical and wear Characteristics of Aluminium Alloy 7075 Reinforced with Nano-Aluminium Oxide/ Magnesium Particles by Stir casting Method. <i>Materials Today: Proceedings</i> , 2020, 24, 273-283.	1.8	12
39	Tribological and Mechanical Behavior Study of Al6061-TiB <sub>2</sub> Metal Matrix Composites Using Stir Casting. <i>Advanced Materials Research</i> , 2014, 984-985, 200-206.	0.3	11
40	Optimization of process parameters for friction stir spot welding of AA6061/Al <sub>2</sub> O <sub>3</sub> by Taguchi method. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	11
41	Investigations on Wire Electric Discharge Machining and Mechanical Behavior of Al 7075/Nano-SiC Composites. <i>Journal of the Institution of Engineers (India): Series D</i> , 2019, 100, 217-227.	1.0	11
42	Wear behavior of Al 7075/Al <sub>2</sub> O <sub>3</sub> /SiC Hybrid NMMC <sup>™</sup> s by Stir Casting Method. <i>Materials Today: Proceedings</i> , 2020, 24, 261-272.	1.8	11
43	Characterization, corrosion and failure strength analysis of Al7075 influenced with B <sub>4</sub> C and Nano-Al <sub>2</sub> O <sub>3</sub> composite using online acoustic emission. <i>Materials Research Express</i> , 2020, 7, 016524.	1.6	11
44	Detection of crack development with Al/SiCp using tensile with online acoustic emission. <i>Journal of Alloys and Compounds</i> , 2019, 778, 951-961.	5.5	9
45	Measurement and Control of Emissions from Diesel Engine Operated by Biodiesel with Bioadditives of Mentha piperita. <i>Measurement and Control</i> , 2017, 50, 31-38.	1.8	6
46	Investigations on Al 7075 /nano-SiC/ B <sub>4</sub> C hybrid reinforcements using liquid casting method. <i>Materials Today: Proceedings</i> , 2021, 46, 8540-8547.	1.8	6
47	Dry Sliding Wear behaviour of cast Al/Al <sub>2</sub> O <sub>3</sub> /Gr hybrid nano-composite using response surface methodology. <i>IOP Conference Series: Materials Science and Engineering</i> , 2018, 390, 012105.	0.6	5
48	Synthesis, spectral, thermal studies and dielectric behavior of functionalized TiO <sub>2</sub> -loaded diglycidyl epoxy nanocomposite film. <i>Polymer Bulletin</i> , 2021, 78, 5255-5274.	3.3	5
49	Investigations on Machining and Wear Characteristics of Al 7075/Nano-SiC Composites with WEDM. <i>Journal of Bio- and Tribo-Corrosion</i> , 2019, 5, 1.	2.6	4
50	Investigation on Tribological and Machining Characteristics of Al 7075/MWCNTs Nanocomposites. <i>Journal of Bio- and Tribo-Corrosion</i> , 2020, 6, 1.	2.6	4
51	Effects on Micro-Surface Texturing of Mg/B <sub>4</sub> C Matrix Composites Under Dry Sliding Wear Condition. <i>Transactions of the Indian Institute of Metals</i> , 2020, 73, 897-912.	1.5	4
52	Analysis of failure mode and fracture behavior by using acoustic emission parameter and artificial neural network. <i>Engineering Research Express</i> , 2019, 1, 015013.	1.6	3
53	A Novel Image Processing Technique for Analyzing Wear Worn Surface Roughness and Corrosion Behavior of Sintered Mg/B <sub>4</sub> C Composites. <i>Transactions of the Indian Institute of Metals</i> , 2021, 74, 51-68.	1.5	3
54	A Novel Detection of Defects in Al <sup>+</sup> SiC Composite by Active Pulsed Infrared Thermography Using Data and Image Processing. <i>Transactions of the Indian Institute of Metals</i> , 2020, 73, 2767-2783.	1.5	2

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55	Image Texture Description, Surface-Grains Structure Morphology and Prediction of Wear Parameters for Mg/B4C Composites Using Response Surface Methodology. Metals and Materials International, 0, , 1.	3.4	2
56	Study of Mechanical Behaviour of Stir Cast Aluminium Based Composite Reinforced with Mechanically Ball Milled TiB <sub>2</sub> Nano Particles. Advanced Materials Research, 0, 984-985, 410-415.	0.3	1
57	Mechanical and wear surface characterisation of aluminium hybrid nanocomposite. International Journal of Computational Materials Science and Surface Engineering, 2019, 8, 195.	0.2	1
58	Investigation of Tribo-Mechanical Properties of Polyamide 6 Nano-Biocomposite: Novel Approach Prediction of Fiber Orientation with OMMT. Transactions of the Indian Institute of Metals, 0, , 1.	1.5	1
59	Failure analysis using online acoustic emission and tribological behavior of Al6061-Al <sub>2</sub> O <sub>3</sub> nano composite. Materials Research Express, 2019, 6, 125096.	1.6	0
60	A Novel Automatic Image Intensity Analysis Using Machine Learning Algorithms and Characterization of Tensile Fracture Surface of AA8011-B4C Nano-composite. Transactions of the Indian Institute of Metals, 0, , .	1.5	0