Ramanujam Karthikeyan

List of Publications by Year
in descending order

88	2,128	279778 23	254170 43
papers	citations	h-index	g-index

88	88	88	1515
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Assessment of factors influencing surface roughness on the machining of glass fiber-reinforced polymer composites. Materials & Design, 2006, 27, 862-871.	5.1	169
2	Study on tool wear and surface roughness in machining of particulate aluminum metal matrix composite-response surface methodology approach. International Journal of Advanced Manufacturing Technology, 2010, 48, 613-624.	3.0	149
3	Mathematical modelling for electric discharge machining of aluminiumâ€“silicon carbide particulate composites. Journal of Materials Processing Technology, 1999, 87, 59-63.	6.3	124
4	Assessment of factors influencing surface roughness on the machining of Al/SiC particulate composites. Materials & Design, 2007, 28, 1584-1591.	5.1	117
5	Predictions of the optimized friction stir spot welding process parameters for joining AA2024 aluminum alloy using RSM. International Journal of Advanced Manufacturing Technology, 2010, 51, 173-183.	3.0	110
6	Optimization of electrical discharge machining characteristics of WC/Co composites using non-dominated sorting genetic algorithm (NSGA-II). International Journal of Advanced Manufacturing Technology, 2008, 36, 1124-1132.	3.0	96
7	Development of processing maps for 6061 Al/15% SiCp composite material. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 369, 230-235.	5.6	94
8	OPTIMAL MACHINING CONDITIONS FOR TURNING OF PARTICULATE METAL MATRIX COMPOSITES USING TAGUCHI AND RESPONSE SURFACE METHODOLOGIES. Machining Science and Technology, 2006, 10, 417-433.	2.5	85
9	Study of electrochemical machining characteristics of Al/SiCp composites. International Journal of Advanced Manufacturing Technology, 2009, 43, 256-263.	3.0	80
10	Development of processing maps for 2124Al/SiCp composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 441, 321-325.	5.6	70
11	Multiple Performance Optimization of Machining Parameters on the Machining of GFRP Composites Using Carbide (K10) Tool. Materials and Manufacturing Processes, 2006, 21, 846-852.	4.7	63
12	Multiple performance optimization in machining of GFRP composites by a PCD tool using non-dominated sorting genetic algorithm (NSGA-II). Metals and Materials International, 2009, 15, 249-258.	3.4	57
13	Optimization of machining parameters in turning GFRP composites using a carbide (K10) tool based on the taguchi method with fuzzy logics. Metals and Materials International, 2006, 12, 483-491.	3.4	56
14	Flow stress modeling of AZ91 magnesium alloys at elevated temperature. Journal of Alloys and Compounds, 2011, 509, 4992-4998.	5.5	54
15	Influence of process parameters on electric discharge machining of WC/30%Co composites. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2008, 222, 807-815.	2.4	53
16	Development of processing maps for Al/SiCp composite using fuzzy logic. Journal of Materials Processing Technology, 2007, 183, 104-110.	6.3	46
17	Parametric optimization of electrochemical machining of Al/15% SiCp composites using NSGA-II. Transactions of Nonferrous Metals Society of China, 2011, 21, 2294-2300.	4.2	46
18	Development of processing map for 6061 Al/15% SiCp through neural networks. Journal of Materials Processing Technology, 2005, 166, 423-429.	6.3	45

#	Article	IF	Citations
19	Fatigue life prediction of ZE41A magnesium alloy using Weibull distribution. Materials & Design, 2008, 29, 1549-1553.	5.1	44
20	Influence of variables in deep drawing of AA 6061 sheet. Transactions of Nonferrous Metals Society of China, 2010, 20, 1856-1862.	4.2	38
21	A CRITICAL STUDY ON MACHINING OF Al/SiC COMPOSITES. Materials and Manufacturing Processes, 2001, 16, 47-60.	4.7	35
22	Prediction of the flow stress of 6061 Alâ€“15% SiC â€“ MMC composites using adaptive network based fuzzy inference system. Materials & Design, 2009, 30, 1362-1370.	5.1	34
23	Hot deformation behavior of ZE41A magnesium alloy. Materials & Design, 2008, 29, 860-866.	5.1	26
24	An investigation of hot deformation response of particulate-reinforced magnesium+9% titanium composite. Materials & Design, 2008, 29, 622-627.	5.1	23
25	Optimizing the milling characteristics of Al-SiC particulate composites. Metals and Materials International, 2000, 6, 539-547.	0.2	22
26	Bi-performance optimization of electrochemical machining characteristics of Al/20%SiCp composites using NSGA-II. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2010, 224, 1399-1407.	2.4	21
27	Processing map for hot working of SiCp/7075 Al composites. Transactions of Nonferrous Metals Society of China, 2010, 20, 668-674.	4.2	21
28	Effect of Electrical Discharge Machining on strength and reliability of WCâ€“30%Co composite. Materials & Design, 2012, 39, 469-474.	5.1	20
29	Statistical Optimization and Sensitivity Analysis of Friction Stir Spot Welding Process Parameters for Joining AA 7075 Aluminum Alloy. Experimental Techniques, 2013, 37, 6-15.	1.5	20
30	Modelling and analysis of electrochemical machining of cast Al/20%SiCp composites. Materials Science and Technology, 2010, 26, 289-296.	1.6	18
31	Development and testing of nano particulate lubricant for worm gear application. Journal of Mechanical Science and Technology, 2019, 33, 1785-1791.	1.5	15
32	Optimization of drilling characteristics for Al/SiCp composites using fuzzy/GA. Metals and Materials International, 2002, 8, 163-168.	3.4	12
33	Extraction of Weld Seam in 3D Point Clouds for Real Time Welding Using 5 DOF Robotic Arm. , 2019, , .		12
34	Machining of novel AA7075 foams containing thin-walled ceramic bubbles. Materials and Manufacturing Processes, 2020, 35, 1812-1821.	4.7	12
35	Comparative study on the wear behavior of long and short glass fiber reinforced plastics. Metals and Materials International, 2010, 16, 205-212.	3.4	11
36	Application of Probablistic Neural Network for the Development of Wear Mechanism Map for Glass Fiber Reinforced Plastics. Journal of Reinforced Plastics and Composites, 2007, 26, 1893-1906.	3.1	10

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37	Finite element simulation on effect of bevel angle and filler material on tensile strength of 316L stainless steel/Monel 400 dissimilar metal welded joints. Materials Today: Proceedings, 2020, 28, 1048-1053.	1.8	10
38	Characterisitcs of Al₂O₃ Nano-Particle Filled GFRP Composites Using Wear Maps. Journal of Reinforced Plastics and Composites, 2010, 29, 3006-3015.	3.1	9
39	Design Optimization and Analysis of NACA 0012 Airfoil Using Computational Fluid Dynamics and Genetic Algorithm. Applied Mechanics and Materials, 0, 664, 111-116.	0.2	9
40	Design and Robustness Analysis of Intelligent Controllers for Commercial Greenhouse. Mechanical Sciences, 2020, 11, 299-316.	1.0	9
41	Wear Mechanism of Glass Fiber Reinforced Epoxy Composites Under Dry Sliding Using Fuzzy Clustering Technique. Journal of Reinforced Plastics and Composites, 2009, 28, 1349-1358.	3.1	8
42	Analysis of gas metal arc welding process using GA tuned fuzzy rule based system. Journal of Intelligent and Fuzzy Systems, 2013, 25, 429-440.	1.4	8
43	Digital Image Correlation of Tensile Properties for Monel 400/SS 316L Dissimilar Metal Welding Joints. Materials, 2021, 14, 1560.	2.9	8
44	Embedding IOT Systems for a Fluid Powered Cable Pulling Winch. International Journal of Control and Automation, 2019, 12, 37-48.	0.3	8
45	A survey on vision guided robotic systems with intelligent control strategies for autonomous tasks. Cogent Engineering, 2022, 9, .	2.2	8
46	Application of fuzzy logic for charging control of lead-acid battery in stand-alone solar photovoltaic system. , 2013, , .		7
47	A study on corrosion resistance of dissimilar welds between Monel 400 and 316L austenitic stainless steel. IOP Conference Series: Materials Science and Engineering, 2018, 346, 012025.	0.6	7
48	Prediction of ttt curves of cold working tool steels using support vector machine model. IOP Conference Series: Materials Science and Engineering, 2018, 346, 012067.	0.6	7
49	Application of goal programming technique for Electro Discharge Machining (EDM) characteristics of cemented carbide (WC/Co). International Journal of Materials and Product Technology, 2009, 35, 216.	0.2	6
50	Comparison of GA tuned fuzzy logic and NARMA-L2 controllers for motion control in 5-DOF robot. International Journal of Computers and Applications, 2017, 39, 69-78.	1.3	6
51	Optimization of Electrical Resistance Spot Welding and Comparison with Friction Stir Spot Welding of AA2024-T3 Aluminum Alloy Joints. Materials Today: Proceedings, 2017, 4, 1762-1771.	1.8	6
52	Electrochemical Impedance Analysis on Cryogenically Treated Dissimilar Metal Welding of 316L Stainless Steel and Monel 400 Alloy Using GTAW. Metals, 2019, 9, 1088.	2.3	6
53	Optimization of tensile properties of 316L stainless steel and Monel 400 weld joints using genetic algorithm. Materials Today: Proceedings, 2020, 27, 2846-2851.	1.8	6
54	Formability Analysis of Al/15% SiCp Composites. Materials Science Forum, 2003, 437-438, 227-230.	0.3	5

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55	An investigation of hot deformation response of particulate-reinforced magnesium + 4.5% titanium composite. Materials Research, 2006, 9, 217-222.	1.3	5
56	Development of processing maps for as-cast ZE41A magnesium alloy. Transactions of Nonferrous Metals Society of China, 2010, 20, 22-27.	4.2	5
57	Application of a novel fuzzy logic controller for a 5-DOF articulated anthropomorphic robot. , 2015, , .		5
58	Modelling, Simulation and Control of Incremental Sheet Metal Forming Process using CNC Machine Tool. Procedia Manufacturing, 2018, 26, 95-106.	1.9	5
59	Effect of Cryogenic treatment on VIKING cold working tool steel and development of wear mechanism maps. Procedia Manufacturing, 2018, 26, 329-342.	1.9	5
60	A Numerical Simulation of Machining 6061 Syntactic Foams Reinforced with Hollow Al2O3 Shells. Metals, 2022, 12, 596.	2.3	5
61	Sensitivity analysis and statistical process optimisation of deep drawing of AA 6061 sheet material. Materials Science and Technology, 2013, 29, 573-580.	1.6	4
62	Finite element simulation and Experimental verification of Incremental Sheet metal Forming. IOP Conference Series: Materials Science and Engineering, 2018, 346, 012075.	0.6	4
63	Influence of silica nanospheres on corrosion behavior of magnesium matrix syntactic foam. IOP Conference Series: Materials Science and Engineering, 2018, 346, 012012.	0.6	4
64	Prediction of Key Crop Growth Parameters in a Commercial Greenhouse Using CFD Simulation and Experimental Verification in a Pilot Study. Agriculture (Switzerland), 2021, 11, 658.	3.1	4
65	Optimisation of ECM parameters using RSM and non-dominated sorting genetic algorithm (NSGA II). International Journal of Machining and Machinability of Materials, 2013, 14, 77.	0.1	3
66	Design Optimisation and Analysis of a Quadrotor Arm Using Finite Element Method. Applied Mechanics and Materials, 2014, 664, 371-375.	0.2	3
67	Application of Model Predictive Controller for 2-DOF robot manipulator. , 2015, , .		3
68	Real-Time Tracing Of A Weld Line Using Artificial Neural Networks. , 2018, , .		3
69	Application of Convolutional Neural Network for Classification and Tracking of Weld Seam Shapes for TAL Brabo Manipulator. Materials Today: Proceedings, 2020, 28, 491-497.	1.8	3
70	A review of upgradation of energy-efficient sustainable commercial greenhouses in Middle East climatic conditions. Open Agriculture, 2021, 6, 308-328.	1.7	3
71	Modeling of Machining Parameters to Predict Surface Roughness in Machining Al/SiC Particulate Composites by Carbide Insert. Multidiscipline Modeling in Materials and Structures, 2008, 4, 345-358.	1.3	2
72	Design and analysis of a switched reluctance generator for rural electrification in stand alone wind energy coversion system. , 2009, , .		2

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73	Wear Characterisitcs of Nano-Particle Filled GFRP Composites. Advanced Composites Letters, 2010, 19, 096369351001900.	1.3	2
74	Electrochemical machining of Al/15% SiCP composites through a response surface methodology-based approach. International Journal of Materials Research, 2012, 103, 378-382.	0.3	2
75	Biomass Boiler Drum Water Level Control System Using Neural Networks. Applied Mechanics and Materials, 0, 541-542, 1260-1265.	0.2	2
76	Performance Evaluation of Digital Image Processing and Artificial Neural Networks for Weld Line Detection of Robotic Manipulator. , 2017, , .		2
77	Tool life and surface integrity aspects when drilling nickel alloy. IOP Conference Series: Materials Science and Engineering, 2018, 346, 012042.	0.6	2
78	Effect of Deep Cryogenic treatment on AISI A8 Tool steel & Development of Wear Mechanism maps using Fuzzy Clustering. IOP Conference Series: Materials Science and Engineering, 2018, 346, 012006.	0.6	2
79	Effect of rotation speed and welding speed on Friction Stir Welding of AA1100 Aluminium alloy. IOP Conference Series: Materials Science and Engineering, 2018, 346, 012060.	0.6	2
80	Tribocorrosion Mechanisms of Pure Mgâ€“SiO2 Nano Syntactic Biodegradable Foams Against Bovine Bone in Artificial Saliva Solution. Journal of Bio- and Tribo-Corrosion, 2021, 7, 1.	2.6	2
81	Application of Fuzzy Logic Control Strategy for Temperature Control in Friction Stir Welding. , 2013, , .		1
82	Prediction Analysis of Weld-Bead and Heat Affected Zone in TIG welding using Artificial Neural Networks. IOP Conference Series: Materials Science and Engineering, 2018, 346, 012038.	0.6	1
83	Time Series Prediction of Weld Seam Coordinates for 5 DOF Robotic Manipulator Using NARX Neural Network. Lecture Notes in Electrical Engineering, 2020, , 537-545.	0.4	1
84	Modeling and Control Techniques for Microstructure Development. Applied Mechanics and Materials, 0, 541-542, 317-323.	0.2	0
85	Electro Discharge Machining of WC/Ni Mixed Ceramic. Applied Mechanics and Materials, 2015, 813-814, 309-316.	0.2	0
86	Vision-Based Forward Kinematics Using ANN for Weld Line Detection with a 5-DOF Robot Manipulator. Advances in Intelligent Systems and Computing, 2018, , 309-318.	0.6	0
87	Comparative study of manufacturing condyle implant using rapid prototyping and CNC machining. IOP Conference Series: Materials Science and Engineering, 2018, 346, 012061.	0.6	0
88	Tracing a Weld Line using Artificial Neural Networks. International Journal of Networked and Distributed Computing, 2018, 6, 216.	1.9	0