Selvarajan Rajakumar

List of Publications by Year
in descending order

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46 papers	1,504 citations	393982 19 h-index	315357 38 g-index
46 all docs	46 docs citations	46 times ranked	979 citing authors

#	Article	IF	Citations
1	Influence of friction stir welding process and tool parameters on strength properties of AA7075-T6 aluminium alloy joints. Materials & Design, 2011, 32, 535-549.	5.1	267
2	Predicting tensile strength, hardness and corrosion rate of friction stir welded AA6061-T6 aluminium alloy joints. Materials & Design, 2011, 32, 2878-2890.	5.1	144
3	Optimization of the friction-stir-welding process and tool parameters to attain a maximum tensile strength of AA7075â€“T₆ aluminium alloy. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2010, 224, 1175-1191.	1.5	118
4	Establishing relationships between mechanical properties of aluminium alloys and optimised friction stir welding process parameters. Materials & Design, 2012, 40, 17-35.	5.1	108
5	Establishing empirical relationships to predict grain size and tensile strength of friction stir welded AA 6061-T6 aluminium alloy joints. Transactions of Nonferrous Metals Society of China, 2010, 20, 1863-1872.	1.7	107
6	Multi-objective optimization of friction stir welding parameters using desirability approach to join Al/SiCp metal matrix composites. Transactions of Nonferrous Metals Society of China, 2013, 23, 942-955.	1.7	68
7	Optimising diffusion bonding parameters to maximize the strength of AA6061 aluminium and AZ31B magnesium alloy joints. Materials & Design, 2012, 33, 31-41.	5.1	53
8	Effect of shoulder diameter to pin diameter ratio on microstructure and mechanical properties of dissimilar friction stir welded AA2024-T6 and AA7075-T6 aluminum alloy joints. International Journal of Advanced Manufacturing Technology, 2016, 87, 3637-3645.	1.5	52
9	Diffusion bonding of titanium and AA 7075 aluminum alloy dissimilar jointsâ€”process modeling and optimization using desirability approach. International Journal of Advanced Manufacturing Technology, 2016, 86, 1095-1112.	1.5	48
10	Multi-Response Optimization of Friction-Stir-Welded AA1100 Aluminum Alloy Joints. Journal of Materials Engineering and Performance, 2012, 21, 809-822.	1.2	47
11	Correlation between weld nugget grain size, weld nugget hardness and tensile strength of friction stir welded commercial grade aluminium alloy joints. Materials & Design, 2012, 34, 242-251.	5.1	41
12	Prediction and optimization of pulsed current tungsten inert gas welding parameters to attain maximum tensile strength in AZ61A magnesium alloy. Materials & Design, 2012, 37, 334-348.	5.1	40
13	Predicting Grain Size and Tensile Strength of Friction Stir Welded Joints of AA7075-T₆Aluminium Alloy. Materials and Manufacturing Processes, 2012, 27, 78-83.	2.7	39
14	Statistical analysis to predict grain size and hardness of the weld nugget of friction-stir-welded AA6061-T6 aluminium alloy joints. International Journal of Advanced Manufacturing Technology, 2011, 57, 151-165.	1.5	34
15	Friction stir welding of AZ61A magnesium alloy. International Journal of Advanced Manufacturing Technology, 2013, 68, 277-292.	1.5	34
16	Friction stir and pulsed current gas metal arc welding of AZ61A magnesium alloy: A comparative study. Materials & Design, 2013, 49, 267-278.	5.1	28
17	Stress corrosion cracking behaviour of gas tungsten arc welded super austenitic stainless steel joints. Defence Technology, 2015, 11, 282-291.	2.1	28
18	Modelling and Analysis of Thrust Force in Drilling of GFRP Composites Using Response Surface Methodology (RSM). Procedia Engineering, 2012, 38, 3757-3768.	1.2	27

#	Article	IF	Citations
19	Effect of Friction Stir Welding Process Parameters on Microstructure and Mechanical Properties of Dissimilar AA6061-T6 and AA7075-T6 Aluminum Alloy Joints. Metallography, Microstructure, and Analysis, 2016, 5, 476-485.	0.5	25
20	Optimizing Diffusion Bonding Parameters in AA6061-T6 Aluminum and AZ80 Magnesium Alloy Dissimilar Joints. Journal of Materials Engineering and Performance, 2012, 21, 2303-2315.	1.2	19
21	Developing Empirical Relationships to Predict Grain Size and Hardness of the Weld Nugget of Friction Stir Welded AA7075-T6 Aluminium Alloy Joints. Experimental Techniques, 2012, 36, 6-17.	0.9	17
22	Microstructural Evolution and Mechanical Properties of Friction Stir Welded Dissimilar AA2014-T6 and AA7075-T6 Aluminum Alloy Joints. Metallography, Microstructure, and Analysis, 2015, 4, 178-187.	0.5	17
23	Microstructural Characterization and Mechanical Properties of Friction-Welded IN718 and SS410 Dissimilar Joint. Metallography, Microstructure, and Analysis, 2018, 7, 277-287.	0.5	17
24	Response surfaces and sensitivity analysis for friction stir welded AA6061-T6 aluminium alloy joints. International Journal of Manufacturing Research, 2011, 6, 215.	0.1	14
25	Corrosion performance of friction surfaced nickel aluminium bronze (NAB) alloy under erosion corrosion and salt fog environment. Corrosion Engineering Science and Technology, 2018, 53, 21-26.	0.7	12
26	High-temperature diffusion bonding of austenitic stainless steel to titanium dissimilar joints. Materials Research Express, 2019, 6, 066572.	0.8	11
27	Influence of process parameters on hot tensile behavior of rotary friction welded In 718/AISI 410 dissimilar joints. CIRP Journal of Manufacturing Science and Technology, 2021, 35, 830-838.	2.3	9
28	Friction surfacing for enhanced surface protection of marine engineering components: erosion-corrosion study. Journal of the Mechanical Behavior of Materials, 2016, 25, 111-119.	0.7	8
29	Effect of FSW process parameters on strength and peak temperature for joining high-density polyethylene (HDPE) sheets. Revue Des Composites Et Des Materiaux Avances, 2018, 28, 149-160.	0.2	8
30	Optimization of the weld characteristics of plasma-arc welded titanium alloy joints: an experimental study. Materials and Manufacturing Processes, 2022, 37, 896-907.	2.7	7
31	Influence of high temperature diffusion bonding process parameters on mechanical and metallurgical characteristics of nickel superalloy to martensitic stainless steel. Microscopy Research and Technique, 2020, 83, 318-328.	1.2	6
32	Optimizing Diffusion Bonding Parameters to Maximize the Strength of AA6061 Aluminum and AZ61A Magnesium Alloy Joints. Experimental Techniques, 2014, 38, 21-36.	0.9	5
33	Effect of Diffusion Bonding Temperature on Mechanical and Microstructure Characteristics of Cp Titanium and High Strength Aluminium Dissimilar Joints. Applied Mechanics and Materials, 2015, 787, 495-499.	0.2	5
34	Microstructure and Mechanical Properties of Friction Stir Welded Joints of Dissimilar AA6061-T6 and AA7075-T6 Aluminium Alloys. Applied Mechanics and Materials, 0, 787, 350-354.	0.2	5
35	Evaluating stress corrosion cracking behaviour of high strength AA7075-T651 aluminium alloy. Journal of the Mechanical Behavior of Materials, 2017, 26, 105-112.	0.7	5
36	Optimization of Ti-6Al-4V/AISI304 diffusion bonding process parameters using RSM and PSO algorithm. Multidiscipline Modeling in Materials and Structures, 2019, 15, 1037-1052.	0.6	5

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37	Mechanical and Microstructural Characteristics of Conventional and Robotic Gas Metal Arc Welded Low Carbon Steel Joints: A Comparative Study. Metallography, Microstructure, and Analysis, 2020, 9, 337-344.	0.5	5
38	Investigation on Processing Maps of Diffusion Bonding Process Parameters for Ti-6Al-4â€‰V/AISI304 Dissimilar Joints. Advances in Materials Science and Engineering, 2021, 2021, 1-9.	1.0	5
39	Diffusion bonding of a titanium alloy to austenitic stainless steel using copper as an interlayer. SN Applied Sciences, 2019, 1, 1.	1.5	4
40	Microstructure and Mechanical Properties of Electrical Resistance Spot Welded Interstitial Free Steel Joints. Journal of Advanced Microscopy Research, 2015, 10, 146-154.	0.3	4
41	Hot corrosion behaviour of constant and pulsed current welded Hastelloy X in Na₂SO₄, V₂O₅, and NaCl salt mixture at 900 Â°C. Materials Research Express, 2022, 9, 020008.	0.8	3
42	Influence of rotational speed on mechanical and microstructural characteristics on the rotary friction welded as-cast LM25 aluminium alloy. Materials Today: Proceedings, 2021, 45, 630-633.	0.9	2
43	Effect of Tool Rotational Speed on Tensile and Microstructural Behaviour of Friction Stir Welded AZ31B Magnesium Alloy Joints. Journal of Advanced Microscopy Research, 2015, 10, 277-283.	0.3	1
44	Effects of Friction Pressure and Friction Time on the Mechanical and Microstructure Properties of Friction Welded IN718 and SS410 Dissimilar Joints. Journal of Advanced Microscopy Research, 2018, 13, 211-216.	0.3	1
45	Influence of Rotational Speed on Mechanical and Microstructural Characteristics on the Rotary Friction Welded LM25/10%SiC Aluminium Metal Matrix Composites. Journal of Advanced Microscopy Research, 2018, 13, 278-281.	0.3	1
46	Effect of Holding Time on Microstructural Characteristics and Mechanical Properties of Ti64 Diffusion Bonds. Lecture Notes on Multidisciplinary Industrial Engineering, 2020, , 741-749.	0.4	0