

Sathiya Paulraj

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Dissimilar Cladding of Ni-Cr-Mo Superalloy over 316L Austenitic Stainless Steel: Morphologies and Mechanical Properties. <i>Metals and Materials International</i> , 2021, 27, 1155-1172.	3.4	15
2	MECHANICAL PROPERTIES ESTIMATION FROM TENSILE TESTING OF AA6063-AISI304L BIMETAL JOINTS FRICTION WELDED WITH DIFFERENT JOINING METHODS. <i>Surface Review and Letters</i> , 2021, 28, 2150013.	1.1	2
3	Effect of faying surfaces and characterization of aluminium AA6063-steel AISI304L dissimilar joints fabricated by friction welding with hemispherical bowl and threaded faying surfaces. <i>International Journal of Advanced Manufacturing Technology</i> , 2021, 116, 629-666.	3.0	4
4	Corrosion and Creep Properties of Weld Beads Produced on AA5083-H111 Alloy Sheets Using SpinArc GMAW Process. <i>Metals and Materials International</i> , 2020, 26, 115-129.	3.4	3
5	Parameters Optimization for End Milling of Al7075-ZrO ₂ -C Metal Matrix Composites Using GRA and ANOVA. <i>Transactions of the Indian Institute of Metals</i> , 2020, 73, 2931-2946.	1.5	15
6	Thermography analysis and porosity formation during laser beam welding of AA5083-H111 aluminum alloy. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 146, 1551.	3.6	2
7	Laves Phase Formation and Segregation of Nb in Ni-Cr-Mo Superalloy over 316L by Hot Wire (HW) TIG Cladding Process. <i>Arabian Journal for Science and Engineering</i> , 2020, 45, 9685-9698.	3.0	6
8	Experimental study on the effect of silver, nickel and chromium interlayers and upset pressure in joining SS304L-AA6063 alloys through direct drive friction welding process. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2020, 42, 1.	1.6	10
9	Application of ANN Modelling and GA Optimization for Improved Creep and Corrosion Properties of Spin-Arc Welded AA5083-H111 Alloy. <i>Russian Journal of Non-Ferrous Metals</i> , 2020, 61, 188-198.	0.6	5
10	POST WELD HEAT TREATMENT OF NiTiNiO SHAPE MEMORY ALLOY USING LASER POWER SOURCE. <i>Surface Review and Letters</i> , 2020, 27, 1950160.	1.1	1
11	Mechanical properties characterisation of dissimilar joint of high-temperature materials using Thermo-Calc Classic (TCC) diagram analysis. <i>Materials at High Temperatures</i> , 2019, 36, 195-211.	1.0	7
12	Structure-Property relationships of Inconel 625 Cladding on AISI 316L substrate produced by Hot Wire (HW) TIG metal deposition technique. <i>Materials Research Express</i> , 2019, 6, 106539.	1.6	18
13	The effect of ligament size on the thermal fatigue life of 9Cr 1Mo steel boiler header under cold, warm and hot starts. <i>Engineering Failure Analysis</i> , 2019, 97, 727-739.	4.0	6
14	Optimization, characterization and heat treatment of TIG-welded AA2219-T87 alloy. <i>Emerging Materials Research</i> , 2019, 8, 387-393.	0.7	3
15	Microstructure and Creep Behavior Property of Dissimilar Joints Between Incoloy 800HT and P91 Steel. <i>Transactions of the Indian Institute of Metals</i> , 2019, 72, 2673-2686.	1.5	3
16	Cold metal arc transfer (CMT) metal deposition of Inconel 625 superalloy on 316L austenitic stainless steel: microstructural evaluation, corrosion and wear resistance properties. <i>Materials Research Express</i> , 2019, 6, 066516.	1.6	30
17	Influence of melting current pulse duration on microstructural features and mechanical properties of AA5083 alloy weldments. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 746, 167-178.	5.6	8
18	Application of Genetic Algorithm Optimization Technique in TIG Welding of 15CDV6 Aerospace Steel. <i>Silicon</i> , 2019, 11, 459-469.	3.3	12

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19	Microstructure Evaluation on Friction Stir Welding of Cryorolled 2219 Aluminum Alloy. Journal of Testing and Evaluation, 2019, 47, 2827-2846.	0.7	0
20	Effect of Pulse Duration on Corrosion and Impression Creep Properties of AA5083-H111 Al-Mg Alloy Weldments Processed by GTAW. Advanced Engineering Materials, 2018, 20, 1701147.	3.5	4
21	Multi-response optimization of process parameters for GTAW process in dissimilar welding of Incoloy 800HT and P91 steel by using grey relational analysis. IOP Conference Series: Materials Science and Engineering, 2018, 314, 012023.	0.6	3
22	Microstructural and Mechanical Characterization of as Weld and Aged Conditions of AA2219 Aluminium Alloy by Gas Tungsten Arc Welding Process. Russian Journal of Non-Ferrous Metals, 2018, 59, 93-101.	0.6	3
23	A comparative analysis of metallurgical and mechanical properties of friction welded and post weld heat treated (oil quenched) duplex stainless steel joints. Materials at High Temperatures, 2018, 35, 309-315.	1.0	2
24	Application of GRA and TOPSIS Optimization Techniques in GTA Welding of 15CDV6 Aerospace Material. Transactions of the Indian Institute of Metals, 2018, 71, 373-382.	1.5	31
25	Influences of metastable ϵ , ϵ^2 and stable η intermetallics formed during cryorolling and friction stir welding process on AA2219. Journal of Alloys and Compounds, 2018, 732, 624-629.	5.5	13
26	Parameter optimization of friction stir welding of cryorolled AA2219 alloy using artificial neural network modeling with genetic algorithm. International Journal of Advanced Manufacturing Technology, 2018, 94, 3117-3129.	3.0	61
27	A comparison of the effect of different heat treatment processes on laser-welded NiTiInol sheets. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	6
28	Mechanical and Metallurgical Characterization of Laser Welding on P91 Ferritic Steel and Incoloy 800HT Dissimilar Joints. Materials Research, 2018, 21, .	1.3	9
29	Influence of Filler Wire Diameter on Mechanical and Corrosion Properties of AA5083-H111 Al-Mg Alloy Sheets Welded Using an AC Square Wave GTAW Process. Transactions of the Indian Institute of Metals, 2018, 71, 1975-1983.	1.5	13
30	EXPERIMENTAL INVESTIGATION ON FRICTION STIR WELDING OF CRYOROLLED AA2219 ALUMINUM ALLOY JOINTS. Surface Review and Letters, 2017, 24, 1750001.	1.1	8
31	Metallurgical Aspects and Optimisation of Yb: YAG Laser Welded NiTiInol Shape Memory Alloy. Materials Today: Proceedings, 2017, 4, 1268-1276.	1.8	7
32	Effect of heat input, heat treatment on microstructure and mechanical properties of GTA welded aerospace material 15CDV6. Journal of Materials Research, 2017, 32, 1361-1366.	2.6	4
33	Parameter Design And Analysis In Laser Welding Of NiTiInol Shape Memory Alloy. Materials Today: Proceedings, 2017, 4, 8883-8891.	1.8	9
34	Multi-Response Optimization of Process Parameters for MIG Welding of AA2219-T87 by Taguchi Grey Relational Analysis. Materials Today: Proceedings, 2017, 4, 8892-8900.	1.8	12
35	Application of Artificial Neural Network Modelling for Optimization of Yb: YAG Laser Welding of Nitinol. Transactions of the Indian Institute of Metals, 2017, 70, 1763-1771.	1.5	20
36	Effect of Heat Input on Mechanical and Metallurgical Properties of Gas Tungsten Arc Welded Lean Super Martensitic Stainless Steel. Materials Research, 2016, 19, 572-579.	1.3	11

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37	Metallurgical characterizations and mechanical properties on friction welding of Incoloy 800H joints. <i>Journal of Materials Research</i> , 2016, 31, 2173-2185.	2.6	13
38	A Study on the Effect of Different Activating Flux on A-TIG Welding Process of Incoloy 800H. <i>Advances in Materials Science</i> , 2016, 16, 26-37.	1.0	18
39	Multi-response optimization of process parameters for TIG welding of Incoloy 800HT by Taguchi grey relational analysis. <i>Engineering Science and Technology, an International Journal</i> , 2016, 19, 811-817.	3.2	43
40	A Review of Similar and Dissimilar Micro-joining of Nitinol. <i>Jom</i> , 2016, 68, 1227-1245.	1.9	31
41	METALLURGICAL AND CORROSION CHARACTERIZATION OF POST WELD HEAT TREATED DUPLEX STAINLESS STEEL (UNS S31803) JOINTS BY FRICTION WELDING PROCESS. <i>Surface Review and Letters</i> , 2016, 23, 1650013.	1.1	1
42	Optimization of process parameters of friction welding of UNS S31803 duplex stainless steels joints. <i>Advances in Manufacturing</i> , 2016, 4, 55-65.	6.1	10
43	Effects of post weld heat treatment on friction welded duplex stainless steel joints. <i>Journal of Manufacturing Processes</i> , 2016, 21, 196-200.	5.9	22
44	Comparative study on transverse shrinkage, mechanical and metallurgical properties of AA2219 aluminium weld joints prepared by gas tungsten arc and gas metal arc welding processes. <i>Defence Technology</i> , 2015, 11, 262-268.	4.2	15
45	Finite element modelling and characterization of friction welding on UNS S31803 duplex stainless steel joints. <i>Engineering Science and Technology, an International Journal</i> , 2015, 18, 704-712.	3.2	19
46	A Comparative Study of Artificial Neural Network and Response Surface Methodology for Optimization of Friction Welding of Incoloy 800 H. <i>Acta Metallurgica Sinica (English Letters)</i> , 2015, 28, 892-902.	2.9	12
47	The impact of heat input on the strength, toughness, microhardness, microstructure and corrosion aspects of friction welded duplex stainless steel joints. <i>Journal of Manufacturing Processes</i> , 2015, 18, 92-106.	5.9	57
48	Artificial neural network modeling studies to predict the friction welding process parameters of Incoloy 800H joints. <i>Engineering Science and Technology, an International Journal</i> , 2015, 18, 394-407.	3.2	34
49	Experimental Investigation of the A-TIG Welding Process of Incoloy 800H. <i>Materials and Manufacturing Processes</i> , 2015, 30, 1154-1159.	4.7	41
50	Multiobjective optimization of friction welding of UNS S32205 duplex stainless steel. <i>Defence Technology</i> , 2015, 11, 157-165.	4.2	17
51	Multi-objective Optimization of Continuous Drive Friction Welding Process Parameters Using Response Surface Methodology with Intelligent Optimization Algorithm. <i>Journal of Iron and Steel Research International</i> , 2015, 22, 954-960.	2.8	25
52	Experimental Investigation on Friction Welding of UNS S32205 Duplex Stainless Steel. <i>Acta Metallurgica Sinica (English Letters)</i> , 2014, 27, 995-1007.	2.9	11
53	Simulation and parameter optimization of flux cored arc welding using artificial neural network and particle swarm optimization algorithm. <i>Journal of Intelligent Manufacturing</i> , 2014, 25, 67-76.	7.3	88
54	Prediction and optimization of friction welding parameters for super duplex stainless steel (UNS) Tj ETQq0 0 0 rgBT_/_Overlock_10 Tf 50 6	5.1	22

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55	Characterization of microstructure, toughness, and chemical composition of friction-welded joints of UNS S32205 duplex stainless steel. Friction, 2014, 2, 82-91.	6.4	8
56	Process Parameter Optimization of AISI 316L(N) Weld Joints Produced using Flux-Cored Arc Welding Process. Transactions of the Indian Institute of Metals, 2013, 66, 123-132.	1.5	11
57	Genetic algorithm based optimization of the process parameters for gas metal arc welding of AISI 904 L stainless steel. Journal of Mechanical Science and Technology, 2013, 27, 2457-2465.	1.5	19
58	Shielding gas effects on flux cored arc welding of AISI 316L (N) austenitic stainless steel joints. Materials & Design, 2013, 45, 43-51.	5.1	29
59	Shielding gas effect on weld characteristics in arc-augmented laser welding process of super austenitic stainless steel. Optics and Laser Technology, 2013, 45, 46-55.	4.6	25
60	Effect of shielding gases on microstructure and mechanical properties of super austenitic stainless steel by hybrid welding. Materials & Design, 2012, 33, 203-212.	5.1	62
61	Optimization of laser welding process parameters for super austenitic stainless steel using artificial neural networks and genetic algorithm. Materials & Design, 2012, 36, 490-498.	5.1	106
62	Finite Element Simulation of Laser Welding of 904L Super Austenitic Stainless Steel. Transactions of the Indian Institute of Metals, 2011, 64, 409-416.	1.5	5
63	Optimization of laser butt welding parameters based on the orthogonal array with fuzzy logic and desirability approach. Structural and Multidisciplinary Optimization, 2011, 44, 499-515.	3.5	13
64	Influence of shielding gas mixtures on bead profile and microstructural characteristics of super austenitic stainless steel weldments by laser welding. International Journal of Advanced Manufacturing Technology, 2011, 54, 525-535.	3.0	25
65	Experimental investigation of thermal fatigue behaviour of header tube to stub welded joint in power plants. International Journal of Materials Research, 2010, 101, 1180-1186.	0.3	5
66	Comparison of thermal fatigue behaviour of ASTM A 213 grade T-92 base and weld tubes. Journal of Mechanical Science and Technology, 2010, 24, 1067-1076.	1.5	3
67	Optimization of welding parameters for laser bead-on-plate welding using Taguchi method. Production Engineering, 2010, 4, 465-476.	2.3	16
68	Effect of shielding gases on mechanical and metallurgical properties of duplex stainless-steel welds. Journal of Materials Science, 2009, 44, 114-121.	3.7	83
69	Investigation of the fatigue behaviour of butt-welded joints treated by ultrasonic peening process and compared with fatigue life assessment standards. International Journal of Advanced Manufacturing Technology, 2009, 40, 74-83.	3.0	17
70	Optimization for friction welding parameters with multiple performance characteristics. International Journal of Mechanics and Materials in Design, 2007, 3, 309-318.	3.0	24
71	Studies on effect of Nb segregation and formation of secondary phases of Ni-Cr-Mo clad on 316L substrate by Cold Metal arc Transfer (CMT) Process. Surface Review and Letters, 0, , .	1.1	0
72	Creep and Corrosion Characteristics of Laser Welded AA5083 Al-Mg alloy. Lasers in Manufacturing and Materials Processing, 0, , 1.	2.2	1