

Abhay Sharma

List of Publications by Year in descending order

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59
papers

1,299
citations

361296

20
h-index

377752

34
g-index

62
all docs

62
docs citations

62
times ranked

974
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic pulse welding: an efficient and environmentally friendly multi-material joining technique. <i>Journal of Cleaner Production</i> , 2015, 100, 35-58.	4.6	167
2	Induction heated tool assisted friction-stir welding (i-FSW): A novel hybrid process for joining of thermoplastics. <i>Journal of Manufacturing Processes</i> , 2015, 20, 234-244.	2.8	86
3	Assessment of jojoba as a pure and nano-fluid base oil in minimum quantity lubrication (MQL) hard-turning of Ti-6Al-4V: A step towards sustainable machining. <i>Journal of Cleaner Production</i> , 2020, 272, 122553.	4.6	82
4	Econological scheduling of a manufacturing enterprise operating under a time-of-use electricity tariff. <i>Journal of Cleaner Production</i> , 2015, 108, 256-270.	4.6	70
5	A new process for design and manufacture of tailor-made functionally graded composites through friction stir additive manufacturing. <i>Journal of Manufacturing Processes</i> , 2017, 26, 122-130.	2.8	63
6	Arc stability and its impact on weld properties and microstructure in anti-phase synchronised synergic-pulsed twin-wire gas metal arc welding. <i>Materials & Design</i> , 2015, 67, 293-302.	5.1	53
7	Dissimilar Friction Stir Welds in AA2219-AA5083 Aluminium Alloys: Effect of Process Parameters on Material Inter-Mixing, Defect Formation, and Mechanical Properties. <i>Transactions of the Indian Institute of Metals</i> , 2016, 69, 1397-1415.	0.7	53
8	Vibration assisted welding processes and their influence on quality of welds. <i>Science and Technology of Welding and Joining</i> , 2016, 21, 243-258.	1.5	52
9	Estimation of heat source model parameters for twin-wire submerged arc welding. <i>International Journal of Advanced Manufacturing Technology</i> , 2009, 45, 1096-1103.	1.5	45
10	Identification of a friction model for minimum quantity lubrication machining. <i>Journal of Cleaner Production</i> , 2014, 83, 437-443.	4.6	42
11	Process parameters-weld bead geometry interactions and their influence on mechanical properties: A case of dissimilar aluminium alloy electron beam welds. <i>Defence Technology</i> , 2018, 14, 137-150.	2.1	35
12	Development of a new semi analytical model for prediction of bubble point pressure of crude oils. <i>Journal of Petroleum Science and Engineering</i> , 2011, 78, 719-731.	2.1	33
13	Improving machining performance of Ti-6Al-4V through multi-point minimum quantity lubrication method. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2019, 233, 321-336.	1.5	32
14	Zone wise local characterization of welds using digital image correlation technique. <i>Optics and Lasers in Engineering</i> , 2014, 63, 30-42.	2.0	28
15	Role of hybrid tool pin profile on enhancing welding speed and mechanical properties of AA2219-T6 friction stir welds. <i>Journal of Materials Processing Technology</i> , 2018, 257, 257-269.	3.1	28
16	A practical approach towards mathematical modeling of deposition rate during twin-wire submerged arc welding. <i>International Journal of Advanced Manufacturing Technology</i> , 2008, 36, 463-474.	1.5	27
17	Machinability of wire and arc additive manufactured components. <i>CIRP Journal of Manufacturing Science and Technology</i> , 2021, 35, 379-389.	2.3	25
18	Mathematical model of bead profile in high deposition welds. <i>Journal of Materials Processing Technology</i> , 2015, 220, 65-75.	3.1	24

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19	Surface Modification and Nanocomposite Layering of Fastener-Hole through Friction-Stir Processing. <i>Materials and Manufacturing Processes</i> , 2014, 29, 726-732.	2.7	23
20	Mathematical modeling of flux consumption during twin-wire welding. <i>International Journal of Advanced Manufacturing Technology</i> , 2008, 38, 1114-1124.	1.5	21
21	On processâ€‘structureâ€‘property interconnection in anti-phase synchronised twin-wire GMAW of low carbon steel. <i>Science and Technology of Welding and Joining</i> , 2016, 21, 452-459.	1.5	20
22	Development of a friction model and its application in finite element analysis of minimum quantity lubrication machining of Ti-6Al-4 V. <i>Journal of Materials Processing Technology</i> , 2016, 238, 181-194.	3.1	19
23	Investigation into Arc Behavior during Twin-Wire Submerged Arc Welding. <i>Materials and Manufacturing Processes</i> , 2010, 25, 873-879.	2.7	18
24	A new approach for attaining uniform properties in build direction in additive manufactured components through coupled thermal-hardness model. <i>Journal of Manufacturing Processes</i> , 2019, 40, 46-58.	2.8	17
25	Mathematical model of complex weld penetration profile: A case of square AC waveform arc welding. <i>Journal of Manufacturing Processes</i> , 2017, 30, 483-491.	2.8	16
26	A fundamental investigation on rotating tool cold expansion: numerical and experimental perspectives. <i>International Journal of Advanced Manufacturing Technology</i> , 2014, 73, 1189-1200.	1.5	14
27	Multi-objective optimization of electro-discharge machining (EDM) parameter for sustainable machining. <i>Materials Today: Proceedings</i> , 2017, 4, 9147-9157.	0.9	14
28	A fundamental study on qualitatively viable sustainable welding process maps. <i>Journal of Manufacturing Systems</i> , 2018, 46, 221-230.	7.6	14
29	Visualizing the vibration effect on the tandem-pulsed gas metal arc welding in the presence of surface tension active elements. <i>International Journal of Heat and Mass Transfer</i> , 2020, 161, 120310.	2.5	14
30	Statistical modeling of deposition rate in twin-wire submerged arc welding. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2009, 223, 851-863.	1.5	13
31	Production performance of water alternate gas injection techniques for enhanced oil recovery: effect of WAG ratio, number of WAG cycles and the type of injection gas. <i>International Journal of Oil, Gas and Coal Technology</i> , 2014, 7, 132.	0.1	13
32	A Semi-Analytical Nonlinear Regression Approach for Weld Profile Prediction: A Case of Alternating Current Square Waveform Submerged Arc Welding of Heat Resistant Steel. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2018, 140, .	1.3	11
33	A comprehensive assessment of minimum quantity lubrication machining from quality, production, and sustainability perspectives. <i>Sustainable Materials and Technologies</i> , 2018, 17, e00070.	1.7	10
34	Metallurgical Characterization of Penetration Shape Change in Workpiece Vibration-Assisted Tandem-Pulsed Gas Metal Arc Welding. <i>Materials</i> , 2020, 13, 3096.	1.3	10
35	Discrete wavelet analysis of mutually interfering co-existing welding signals in twin-wire robotic welding. <i>Journal of Manufacturing Processes</i> , 2021, 63, 139-151.	2.8	10
36	Multi-Point Injection Minimum Quantity Lubrication Machining. <i>Materials Science Forum</i> , 2015, 830-831, 108-111.	0.3	9

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37	A scheme of comprehensive assessment of weld bead geometry. International Journal of Advanced Manufacturing Technology, 2016, 82, 1507-1515.	1.5	9
38	Thermal modelling of alternating current square waveform arc welding. Case Studies in Thermal Engineering, 2021, 25, 100885.	2.8	9
39	Performance Evaluation of Alternating Current Square Waveform Submerged Arc Welding as a Candidate for Fabrication of Thick Welds in 2.25Cr-1Mo Heat-Resistant Steel. Journal of Pressure Vessel Technology, Transactions of the ASME, 2020, 142, .	0.4	9
40	Integrated model for assessment of electromagnetic force field due to arc welding. Science and Technology of Welding and Joining, 2015, 20, 563-570.	1.5	7
41	Prediction and Control of Asymmetric Bead Shape in Laser-Arc Hybrid Fillet-Lap Joints in Sheet Metal Welds. Lasers in Manufacturing and Materials Processing, 2019, 6, 67-84.	1.2	6
42	Mechanism of Gap Bridgeability in Lap-Fillet Laser-Arc Hybrid Welding. Lasers in Manufacturing and Materials Processing, 2021, 8, 355-371.	1.2	6
43	Bibliometric analysis of machining of titanium alloy research. Materials Today: Proceedings, 2021, 44, 4031-4038.	0.9	5
44	A comparative study on mechanical properties of single- and twin-wire welded joints through multi-objective meta-heuristic optimisation. International Journal of Manufacturing Research, 2016, 11, 374.	0.1	4
45	Bi-polynomial fourth-order weld bead model for improved material utilization and accuracy in wire-arc additive manufacturing: A case of transverse twin-wire welding. Advances in Industrial and Manufacturing Engineering, 2021, 2, 100049.	1.2	4
46	Modified Mathematical Models for Melting Rate in Submerged Arc Welding. Indian Welding Journal, 2007, 40, 21.	0.0	4
47	A Review of Minimum Quantity Lubrication (MQL) Based on Bibliometry. Current Materials Science, 2021, 14, 13-39.	0.2	3
48	A Comparative Study between Linear and Nonlinear Regression Analysis for Prediction of Weld Penetration Profile in AC Waveform Submerged Arc Welding of Heat Resistant Steel. Indian Welding Journal, 2019, 52, 40.	0.0	3
49	Unveiling Liquation and Segregation Induced Failure Mechanism in Thick Dissimilar Aluminum Alloy Electron-Beam Welds. Metals, 2022, 12, 486.	1.0	3
50	Combined Cold Expansion and Friction Stir Processing of Fastener Holes in Aluminum Alloy Al-2014-T6. Transactions of the Indian Institute of Metals, 2017, 70, 107-114.	0.7	2
51	Recent developments in AC square waveform welding. Materials Today: Proceedings, 2021, 45, 5709-5713.	0.9	2
52	A unique CEL numerical method on material flow in a molten pool of workpiece vibration assisted welding. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2020, 38, 54s-58s.	0.1	2
53	Assessment of Stability and Thermophysical Properties of Jojoba Nanofluid as a Metal-Cutting Fluid: Experimental and Modelling Investigation. Lubricants, 2022, 10, 126.	1.2	2
54	Investigations on Gas Trapping Phenomena for Different EOR-Water Alternate Gas Injection Methodologies. , 2011, , .		1

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55	On feasibility of friction stir processing of cylindrical hole. , 2013, , 143-146.		1
56	Arc Behavior Study Using Welding Current Module and its Impact on Residual Stress and Weld Bead in Anti-Phase Synchronized Twin-Wire Gas Metal Arc Welding. Indian Welding Journal, 2019, 52, 64.	0.0	1
57	Impact of Process Modelling on Current Direction of Welding Research and Future Targets. Indian Welding Journal, 2008, 41, 43.	0.0	0
58	Enhancement in Mechanical Properties of Tailored Welded Blanks Due to Pulsed Tig Welding. Indian Welding Journal, 2009, 42, 38.	0.0	0
59	A review on localised and multi-point aerosol application in minimum quantity lubrication machining. International Journal of Precision Technology, 2020, 9, 1.	0.2	0