Huabin Chen

List of Publications by Year
in descending order

45 papers	1,445 citations	279798 23 h-index	345221 36 g-index
48 all docs	48 docs citations	48 times ranked	724 citing authors

#	ARTICLE	IF	CITATIONS
1	Quality analysis of CMT lap welding based on welding electronic parameters and welding sound. Journal of Manufacturing Processes, 2022, 74, 1-13.	5.9	12
2	Influences of weaving parameters on dynamic characteristics and stability control of the droplet transfer in arc-weaving P-GMAW process. International Journal of Advanced Manufacturing Technology, 2022, 119, 5233-5250.	3.0	6
3	Progress and perspectives of in-situ optical monitoring in laser beam welding: Sensing, characterization and modeling. Journal of Manufacturing Processes, 2022, 75, 767-791.	5.9	26
4	Isotropic etching polishing of belt ground Inconel 718 to improve surface strengthening and quality. Surface and Coatings Technology, 2022, 436, 128292.	4.8	6
5	Prediction of welding quality characteristics during pulsed GTAW process of aluminum alloy by multisensory fusion and hybrid network model. Journal of Manufacturing Processes, 2021, 68, 209-224.	5.9	19
6	A novel energy partition model for belt grinding of Inconel 718. Journal of Manufacturing Processes, 2021, 64, 1296-1306.	5.9	11
7	A novel feature-guided trajectory generation method based on point cloud for robotic grinding of freeform welds. International Journal of Advanced Manufacturing Technology, 2021, 115, 1763-1781.	3.0	17
8	A novel material removal rate model based on single grain force for robotic belt grinding. Journal of Manufacturing Processes, 2021, 68, 1-12.	5.9	31
9	A study of dynamic energy partition in belt grinding based on grinding effects and temperature dependent mechanical properties. Journal of Materials Processing Technology, 2021, 294, 117112.	6.3	19
10	Visual-Acoustic Penetration Recognition in Variable Polarity Plasma Arc Welding Process Using Hybrid Deep Learning Approach. IEEE Access, 2020, 8, 120417-120428.	4.2	29
11	Arc sound model for pulsed GTAW and recognition of different penetration states. International Journal of Advanced Manufacturing Technology, 2020, 108, 3175-3191.	3.0	21
12	A new method to achieve dynamic heat input monitoring in robotic belt grinding of Inconel 718. Journal of Manufacturing Processes, 2020, 57, 575-588.	5.9	16
13	In situ studies of full-field residual stress mapping of SS304 stainless steel welds using DIC. International Journal of Advanced Manufacturing Technology, 2020, 109, 45-55.	3.0	2
14	Point cloud 3D parent surface reconstruction and weld seam feature extraction for robotic grinding path planning. International Journal of Advanced Manufacturing Technology, 2020, 107, 827-841.	3.0	33
15	A novel material removal prediction method based on acoustic sensing and ensemble XGBoost learning algorithm for robotic belt grinding of Inconel 718. International Journal of Advanced Manufacturing Technology, 2019, 105, 217-232.	3.0	50
16	Weld penetration in situ prediction from keyhole dynamic behavior under time-varying VPPAW pools via the OS-ELM model. International Journal of Advanced Manufacturing Technology, 2019, 104, 3929-3941.	3.0	15
17	Cracking mechanism and susceptibility of laser melting deposited Inconel 738 superalloy. Materials and Design, 2019, 183, 108105.	7.0	113
18	Spectral diagnosis and defects prediction based on ELM during the GTAW of Al alloys. Measurement: Journal of the International Measurement Confederation, 2019, 136, 405-414.	5.0	22

#	ARTICLE	IF	CITATIONS
19	Online Monitoring of Variable Polarity TIG Welding Penetration State Based on Fusion of Welding Characteristic Parameters and SVM. Transactions on Intelligent Welding Manufacturing, 2019, , 87-104.	0.3	6
20	Prediction of weld bead geometry of MAG welding based on XGBoost algorithm. International Journal of Advanced Manufacturing Technology, 2019, 101, 2283-2295.	3.0	31
21	Online Monitoring and Model-Free Adaptive Control of Weld Penetration in VPPAW Based on Extreme Learning Machine. IEEE Transactions on Industrial Informatics, 2019, 15, 2732-2740.	11.3	68
22	Vision-based deviation extraction for three-dimensional control in robotic welding with steel sheet. International Journal of Advanced Manufacturing Technology, 2018, 95, 4449-4458.	3.0	11
23	Porosity detection in pulsed GTA welding of 5A06 Al alloy through spectral analysis. Journal of Materials Processing Technology, 2018, 259, 332-340.	6.3	29
24	A novel sound-based belt condition monitoring method for robotic grinding using optimally pruned extreme learning machine. Journal of Materials Processing Technology, 2018, 260, 9-19.	6.3	55
25	Acoustic signal-based tool condition monitoring in belt grinding of nickel-based superalloys using RF classifier and MLR algorithm. International Journal of Advanced Manufacturing Technology, 2018, 98, 859-872.	3.0	25
26	VPPAW penetration monitoring based on fusion of visual and acoustic signals using t-SNE and DBN model. Materials and Design, 2017, 123, 1-14.	7.0	52
27	Investigation of porosity in pulsed GTAW of aluminum alloys based on spectral and X-ray image analyses. Journal of Materials Processing Technology, 2017, 243, 365-373.	6.3	26
28	EMD-based pulsed TIG welding process porosity defect detection and defect diagnosis using GA-SVM. Journal of Materials Processing Technology, 2017, 239, 92-102.	6.3	102
29	Monitoring of weld joint penetration during variable polarity plasma arc welding based on the keyhole characteristics and PSO-ANFIS. Journal of Materials Processing Technology, 2017, 239, 113-124.	6.3	52
30	Weld penetration identification for VPPAW based on keyhole features and extreme learning machine. , 2016, , .		5
31	A prediction model for keyhole geometry and acoustic signatures during variable polarity plasma arc welding based on extreme learning machine. Sensor Review, 2016, 36, 257-266.	1.8	24
32	Mixed logic dynamic model for the hybrid characteristics of the dual robotic welding process and system. , 2016, , .		1
33	Parameter Self-Optimizing Clustering for Autonomous Extraction of the Weld Seam Based on Orientation Saliency in Robotic MAG Welding. Journal of Intelligent and Robotic Systems: Theory and Applications, 2016, 83, 219-237.	3.4	12
34	Penetration state recognition based on the double-sound-sources characteristic of VPPAW and hidden Markov Model. Journal of Materials Processing Technology, 2016, 234, 33-44.	6.3	43
35	Multisensor-based real-time quality monitoring by means of feature extraction, selection and modeling for Al alloy in arc welding. Mechanical Systems and Signal Processing, 2015, 60-61, 151-165.	8.0	65
36	Microstructure and mechanical properties of HSLA thick plates welded by novel double-sided gas metal arc welding. International Journal of Advanced Manufacturing Technology, 2015, 78, 457-464.	3.0	17

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37	Effect of weave frequency and amplitude on temperature field in weaving welding process. International Journal of Advanced Manufacturing Technology, 2014, 75, 803-813.	3.0	44
38	Online welding quality monitoring based on feature extraction of arc voltage signal. International Journal of Advanced Manufacturing Technology, 2014, 70, 1661-1671.	3.0	52
39	Real-time control of welding penetration during robotic GTAW dynamical process by audio sensing of arc length. International Journal of Advanced Manufacturing Technology, 2014, 74, 235-249.	3.0	75
40	The realization of no back chipping for thick plate welding. International Journal of Advanced Manufacturing Technology, 2014, 74, 79-88.	3.0	17
41	The acquisition and processing of real-time information for height tracking of robotic GTAW process by arc sensor. International Journal of Advanced Manufacturing Technology, 2013, 65, 1031-1043.	3.0	54
42	Arc spectral processing technique with its application to wire feed monitoring in Al–Mg alloy pulsed gas tungsten arc welding. Journal of Materials Processing Technology, 2013, 213, 707-716.	6.3	34
43	Spectroscopic Diagnostics of Pulsed Gas Tungsten Arc Welding Plasma and Its Effect on Weld Formation of Aluminum-Magnesium Alloy. Spectroscopy Letters, 2013, 46, 350-363.	1.0	10
44	Research on the Real-time Tracking Information of Three-dimension Welding Seam in Robotic GTAW Process Based on Composite Sensor Technology. Journal of Intelligent and Robotic Systems: Theory and Applications, 2012, 68, 89-103.	3.4	41
45	Closed-Loop Control of Robotic Arc Welding System with Full-penetration Monitoring. Journal of Intelligent and Robotic Systems: Theory and Applications, 2009, 56, 565-578.	3.4	39