

Shinichi Tashiro

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/336226/publications.pdf>

Version: 2024-02-01

101
papers

952
citations

471509

17
h-index

552781

26
g-index

104
all docs

104
docs citations

104
times ranked

332
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of Groove on Metal Vapour Behavior and Arc Characteristics in TIG Welding of High Manganese Stainless Steels. Plasma Chemistry and Plasma Processing, 2022, 42, 229-245.	2.4	1
2	Observation of Microstructure and Mechanical Properties in Heat Affected Zone of As-Welded Carbon Steel by Using Plasma MIG welding Process. Metals, 2022, 12, 315.	2.3	4
3	Numerical Analysis of Metal Transfer Process in Plasma MIG Welding. Metals, 2022, 12, 326.	2.3	5
4	Elucidation of arc coupling mechanism in plasma-MIG hybrid welding process through spectroscopic measurement of 3D distributions of plasma temperature and iron vapor concentration. Journal of Manufacturing Processes, 2022, 77, 743-753.	5.9	6
5	Mild steel metal rotating spray transfer behavior in magnetically controlled gas metal arc welding. Materials Today Communications, 2022, 31, 103352.	1.9	2
6	Numerical Analysis of Physical Characteristics and Heat Transfer Decoupling Behavior in Bypass Coupling Variable Polarity Plasma Arc. Materials, 2022, 15, 3174.	2.9	6
7	Effect of Flux Ratio on Droplet Transfer Behavior in Metal-Cored Arc Welding. Metals, 2022, 12, 1069.	2.3	5
8	Coupled mechanisms of the keyhole, energy transfer and compositional change associated with the variable polarity plasma arc process. Journal Physics D: Applied Physics, 2021, 54, 115204.	2.8	8
9	Physical mechanism of material flow in variable polarity plasma arc keyhole welding revealed by <i>in situ</i> x-ray imaging. Physics of Fluids, 2021, 33, .	4.0	18
10	A Study on the Effect of Current Waveform on Intermetallics Formation and the Weldability of Dissimilar Materials Welded Joints (AA5052 Alloy- σ GI Steel) in AC Pulse GMAW. Metals, 2021, 11, 561.	2.3	2
11	Physical mechanisms of fluid flow and joint inhomogeneity in variable-polarity plasma arc welding of thick aluminum alloy plates. Physics of Fluids, 2021, 33, .	4.0	9
12	Numerical analysis of the effect of heat loss by zinc evaporation on aluminum alloy to hot-dip galvanized steel joints by electrode negative polarity ratio varied AC pulse gas metal arc welding. Journal of Manufacturing Processes, 2021, 69, 671-683.	5.9	8
13	Relationship among Welding Defects with Convection and Material Flow Dynamic Considering Principal Forces in Plasma Arc Welding. Metals, 2021, 11, 1444.	2.3	4
14	Influence of Cross-Wind on CO ₂ Arc Welding of Carbon Steel. Metals, 2021, 11, 1677.	2.3	2
15	Influence of Sulfur Content on Penetration Depth in TIG Welding for High Manganese Stainless Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 5293.	2.2	1
16	A Study on Reducing Oxygen Content in Weld Metals for Narrow Groove GMA Welding with a Local CO ₂ Adding Nozzle. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2021, 39, 301-308.	0.5	0
17	Influence of shielding gas on cathode spot behaviours in alternating current tungsten inert gas welding of aluminium. Science and Technology of Welding and Joining, 2020, 25, 258-264.	3.1	4
18	Analysis of heat transfer and material flow in hybrid KPAW-GMAW process based on the novel three dimensional CFD simulation. International Journal of Heat and Mass Transfer, 2020, 147, 118921.	4.8	25

#	ARTICLE	IF	CITATIONS
19	Material flow analyses of high-efficiency joint process in VPPA keyhole flat welding by X-ray transmission system. <i>Journal of Cleaner Production</i> , 2020, 250, 119450.	9.3	18
20	Numerical study on arc-droplet coupled behavior in magnetic field controlled GMAW process. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 115202.	2.8	18
21	Effect of the eddies formed inside a weld pool on welding defects during plasma keyhole arc welding. <i>Journal of Manufacturing Processes</i> , 2020, 59, 649-657.	5.9	19
22	3D Numerical Study of External Axial Magnetic Field-Controlled High-Current GMAW Metal Transfer Behavior. <i>Materials</i> , 2020, 13, 5792.	2.9	6
23	Effect of Plasma Flow in Plasma MIG Welding Process to the Microstructure Refinement at Heat Affected Zone of As-Welded Carbon Steel. <i>Materials Science Forum</i> , 2020, 1010, 15-20.	0.3	3
24	Investigation of the influence of buoyancy on gas convection of a horizontal xenon short arc lamp through 3D numerical simulation. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 385205.	2.8	1
25	Application of pulse plasma MIG welding process to Al/steel dissimilar joining. <i>Welding in the World, Le Soudage Dans Le Monde</i> , 2020, 64, 857-871.	2.5	16
26	Study on the Decoupled Transfer of Heat and Mass in Wire Variable Polarity Plasma Arc Welding. <i>Materials</i> , 2020, 13, 1073.	2.9	5
27	Influence of Electrode Energy Balance on Gas Convective Pattern of a High-Pressure Xenon Short Arc Lamp. <i>Plasma Chemistry and Plasma Processing</i> , 2020, 40, 819-837.	2.4	4
28	Influence of shielding gas composition on molten metal flow behavior during plasma keyhole arc welding process. <i>Journal of Manufacturing Processes</i> , 2020, 53, 431-437.	5.9	17
29	Numerical Simulation of the Behavior of Hydrogen Source in a Novel Welding Process to Reduce Diffusible Hydrogen. <i>Materials</i> , 2020, 13, 1619.	2.9	3
30	Numerical Prediction of Influence of Gas Species on Gas Convective Pattern of Short Arc Lamp. <i>Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society</i> , 2020, 38, 30s-34s.	0.5	0
31	Study of Shieldability of the Low Hydrogen Welding Process by Numerical Simulation. <i>Journal of Smart Processing</i> , 2020, 9, 199-207.	0.1	2
32	Numerical Analysis on Thermal Characteristics of Direct Current Pulsed Gas Metal Arc Welded Joints of AA5052 Aluminum Alloy to DP590 High Strength Steel. <i>Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society</i> , 2020, 38, 93s-97s.	0.5	0
33	Numerical study of keyhole behaviors and thermal fluid flow in high current plasma arc welding. <i>Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society</i> , 2020, 38, 40s-43s.	0.5	0
34	Analysis of the energy propagation in the keyhole plasma arc welding using a novel fully coupled plasma arc-keyhole-weld pool model. <i>International Journal of Heat and Mass Transfer</i> , 2019, 141, 604-614.	4.8	40
35	Development of novel MIG welding process with duplex current feeding. <i>Journal of Manufacturing Processes</i> , 2019, 47, 74-82.	5.9	8
36	The influence mechanism of variable polarity plasma arc pressure on flat keyhole welding stability. <i>Journal of Manufacturing Processes</i> , 2019, 37, 519-528.	5.9	18

#	ARTICLE	IF	CITATIONS
37	Effect of Arc Pressure on the Digging Process in Variable Polarity Plasma Arc Welding of A5052P Aluminum Alloy. <i>Materials</i> , 2019, 12, 1071.	2.9	17
38	The effect of electrode energy balance on variable polarity plasma arc pressure. <i>International Journal of Heat and Mass Transfer</i> , 2019, 145, 118715.	4.8	10
39	Numerical Simulation of Gas Flow in a Novel Torch for Reducing Diffusible Hydrogen. <i>Journal of Smart Processing</i> , 2019, 8, 219-224.	0.1	1
40	Modeling of a xenon short arc lamp considering the behavior of tungsten vapour evaporated from electrodes. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 334001.	2.8	11
41	Investigating cathode spot behavior in argon alternating current tungsten inert gas welding of aluminum through experimental observation. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 26LT02.	2.8	6
42	Optical Measurement of Surface Temperature Distribution of Weld Pool in AC Tungsten Inert Gas Welding of Aluminum A1050. <i>Journal of Smart Processing</i> , 2019, 8, 213-218.	0.1	2
43	Influence of Current Feeding Position of Duplex Current Feeding MIG Welding on Droplet Heat Quantity. <i>Materials</i> , 2019, 12, 3590.	2.9	5
44	Elucidation of the weld pool convection and keyhole formation mechanism in the keyhole plasma arc welding. <i>International Journal of Heat and Mass Transfer</i> , 2019, 131, 920-931.	4.8	56
45	A novel electrode-arc-weld pool model for studying the keyhole formation in the keyhole plasma arc welding process. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 165203.	2.8	25
46	The Effect of Cold Cracking Prevention of FCAW by the Welding Process for Reducing Diffusible Hydrogen. <i>Journal of Smart Processing</i> , 2019, 9, 33-37.	0.1	0
47	Influence of Thermodynamic and Transport Properties of Gas on Heat Load to Bulb of Xenon Short Arc Lamp. <i>Journal of Smart Processing</i> , 2019, 9, 148-155.	0.1	0
48	Application of Duplex Current Feeding Metal Inert Gas Welding to Overlay Welding Using Nickel Based Alloy Welding. <i>Journal of Smart Processing</i> , 2019, 9, 140-147.	0.1	2
49	Influence of the magnesium content on cathode spot behavior in AC TIG welding of aluminum alloy. <i>Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society</i> , 2019, 37, 181-186.	0.5	0
50	Study on factors affecting the droplet temperature in plasma MIG welding process. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 135206.	2.8	27
51	Numerical analysis of plasma arc physical characteristics under additional constraint of keyhole. <i>Chinese Physics B</i> , 2018, 27, 034701.	1.4	19
52	Experimental investigation on the weld pool formation process in plasma keyhole arc welding. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 015204.	2.8	30
53	Numerical simulation of fume formation process in GMA welding. <i>Welding in the World, Le Soudage Dans Le Monde</i> , 2018, 62, 1331-1339.	2.5	18
54	Behaviors of Cathode Spot in Alternative Current Helium TIG Welding of Aluminum. <i>Journal of Smart Processing</i> , 2018, 7, 243-250.	0.1	4

#	ARTICLE	IF	CITATIONS
55	Droplet Temperature Measurement in Metal Inert Gas Welding Process by Using Two Color Temperature Measurement Method. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2017, 35, 160s-164s.	0.5	10
56	Evaluation of Radiation Characteristics of Xenon Short Arc Lamp by Numerical Simulation. Journal of Smart Processing, 2017, 6, 40-45.	0.1	0
57	Influence of Pilot Gas Composition on Convective Pattern of Weld Pool Surface in Plasma Keyhole Arc Welding. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2017, 35, 98s-102s.	0.5	6
58	Observation of Metal Transfer in Plasma MIG Welding Process. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2017, 35, 33s-37s.	0.5	1
59	Numerical Analysis on Influence of Electrical Conductivity of Wire on Droplet Temperature in Duplex Current Feeding MIG Welding. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2017, 35, 51s-55s.	0.5	4
60	Study on new GMA welding process with duplex current feeding. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2017, 35, 56s-60s.	0.5	2
61	Comparison of Wettability of Beads in MIG Welding Process with Duplex Current Feeding and Conventional MIG Welding Process. Journal of Smart Processing, 2017, 6, 28-32.	0.1	4
62	Numerical simulation of new welding process with duplex current feeding. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2016, 34, 223-230.	0.5	4
63	Study on new GMA welding process with duplex current feeding. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2016, 34, 150-157.	0.5	12
64	Numerical analysis of fume formation mechanism in TIG welding. Welding International, 2015, 29, 165-172.	0.7	3
65	Observation of the Behavior of Cathode Spots in AC Tungsten Inert Gas Welding on Aluminum Plate. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2015, 33, 135s-138s.	0.5	8
66	Study for TIG-MIG hybrid welding process. Welding in the World, Le Soudage Dans Le Monde, 2014, 58, 11-18.	2.5	73
67	Numerical analysis of the influence of particle charging on the fume formation process in arc welding. Journal Physics D: Applied Physics, 2013, 46, 224007.	2.8	7
68	Numerical Simulation of Energy Balance of Short Arc Lamp. IEEJ Transactions on Power and Energy, 2013, 133, 424-429.	0.2	1
69	New Development of Numerical Simulation Technology of High Current Phenomena. IEEJ Transactions on Power and Energy, 2013, 133, 405-408.	0.2	0
70	State-of-the-art technology in visualization of arc welding process. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2013, 82, 99-104.	0.1	0
71	Visualization of Welding and Joining Phenomena with X-ray Transmission Systems. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2013, 82, 505-508.	0.1	2
72	Numerical simulation of keyhole welding of aluminium thick plate with plasma arc. Welding International, 2012, 26, 441-447.	0.7	10

#	ARTICLE	IF	CITATIONS
73	Numerical Analysis of Heat Source Properties of Pulsed Tungsten Inert Gas Arc. Transactions of the Materials Research Society of Japan, 2012, 37, 161-164.	0.2	0
74	Report of 9th International Conference on Trends in Welding Research. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2012, 81, 607-609.	0.1	1
75	Numerical Simulation of Stationary AC Tungsten Inert Gas Welding of Aluminum Plate in Consideration of Oxide Layer Cleaning. IEEJ Transactions on Power and Energy, 2012, 132, 422-427.	0.2	1
76	Driving Force Variation in Weld Pool Affected by Current Density and Flow Velocity of Gas Tungsten Arc Welding. IEEJ Transactions on Power and Energy, 2012, 132, 486-492.	0.2	1
77	Temperature Distribution of Plasma Arc Contaminated with Iron Vapor from Anode under Consideration of Self-absorption. Journal of International Council on Electrical Engineering, 2011, 1, 339-344.	0.4	1
78	Experimental Observation of Cleaning Action of Cathode Spots in AC TIG Welding of Aluminum Plates. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2011, 29, 5s-8s.	0.5	12
79	Improvement of bead formation of plasma MIG welding in pure argon atmosphere. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2011, 29, 39s-42s.	0.5	6
80	Numerical analysis of AC tungsten inert gas welding of aluminum plate in consideration of oxide layer cleaning. Thin Solid Films, 2011, 519, 7025-7029.	1.8	17
81	Numerical simulation of heat source properties of pulsed tungsten inert gas arc. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2011, 29, 9s-13s.	0.5	0
82	Numerical Analysis on Effects of Power Source Characteristics on Arc Properties in Gas Tungsten Arc. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2011, 29, 1s-4s.	0.5	0
83	Non-equilibrium plasma property of ArGTA in low current range. Thin Solid Films, 2010, 518, 3453-3456.	1.8	1
84	Numerical analysis of non-equilibrium plasma property in anode boundary layer of argon Gas Tungsten Arc. Surface and Coatings Technology, 2010, 205, S115-S119.	4.8	8
85	Numerical analysis of fume formation mechanism in arc welding. Journal Physics D: Applied Physics, 2010, 43, 434012.	2.8	41
86	The measurement of metal droplet temperature in GMA welding by infrared two-colour pyrometry. Welding International, 2010, 24, 81-87.	0.7	29
87	Numerical simulation of welding fume formation mechanism in gas tungsten arc welding. Transactions of the Materials Research Society of Japan, 2010, 35, 801-804.	0.2	1
88	Metal Vapor Behavior in GTA Welding of a Stainless Steel Considering the Marangoni Effect. IEEJ Transactions on Electrical and Electronic Engineering, 2009, 4, 497-503.	1.4	9
89	Numerical Simulation of Diffusion of Multiple Metal Vapours in a TIG Arc Plasma for Welding of Stainless Steel. Welding in the World, Le Soudage Dans Le Monde, 2009, 53, R166-R170.	2.5	9
90	The Surface Temperature Measurement of Weld Pool by Infrared Two-Color Pyrometry. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2009, 27, 34-40.	0.5	22

#	ARTICLE	IF	CITATIONS
91	Electron temperature measurement of tungsten inert gas arcs. Thin Solid Films, 2008, 516, 6628-6633.	1.8	6
92	Effect of admixture of metal vapor on cathode surface temperature of plasma torch. Surface and Coatings Technology, 2008, 202, 5255-5258.	4.8	7
93	Temperature Distribution of Argon Gas Tungsten Arc Considering the Nonequilibrium Effect. IEEE Transactions on Plasma Science, 2008, 36, 1070-1071.	1.3	3
94	Dependence of non-equilibrium plasma property of argon GTA on arc current. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2008, 26, 111-116.	0.5	2
95	A Study of Thermal Pinch Effect of Welding Arcs. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2007, 25, 336-342.	0.5	24
96	Numerical analysis of energy source properties of hollow cathode arc. Surface and Coatings Technology, 2007, 201, 5431-5434.	4.8	13
97	Effective Electrode Work Functions in Helium Gas Tungsten Arc During Operation. Plasma Processes and Polymers, 2007, 4, S995-S998.	3.0	1
98	Properties of Mass and Heat Transfer for Tube Cathode Arcs. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2007, 25, 3-9.	0.5	16
99	CO2-shielded arc as a high-intensity heat source. Vacuum, 2006, 80, 1195-1198.	3.5	25
100	Prediction of energy source properties of free-burning arcs. Vacuum, 2006, 80, 1190-1194.	3.5	27
101	Numerical Analysis of Plasma Keyhole Welding of an Aluminum Thin Plate. Ceramic Transactions, 0, , 189-194.	0.1	0