Hamed Jamshidi Aval

List of Publications by Year
in descending order

93	1,895	279487 23	344852 36
papers	citations	h-index	g-index

94	94	94	931
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Development and Characterization of in-situ AA2024-Al3NiCu Composites. International Journal of Metalcasting, 2023, 17, 109-123.	1.5	3
2	An Investigation on the Microstructure and Mechanical Properties of Al-Zn-Mg-Cu/Ti Composite Produced by Compocasting. International Journal of Metalcasting, 2022, 16, 1397-1414.	1.5	10
3	Investigation of microstructure, crystallographic texture, and mechanical behavior of magnesium-based nanocomposite fabricated via multi-pass FSP for biomedical applications. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 125, 104894.	1.5	27
4	Synergistic effects of hybrid (HA+Ag) particles and friction stir processing in the design of a high-strength magnesium matrix bio-nano composite with an appropriate texture for biomedical applications. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 125, 104983.	1.5	28
5	Achieving high strength and superior ductility in Alâ€“Si alloy by cold rolling and friction stir processing. Journal of Alloys and Compounds, 2022, 896, 163102.	2.8	9
6	Effect of friction surfacing on the microstructural and wear characteristics of Al-Cu-Mg alloy coating reinforced by nickel aluminide. Intermetallics, 2022, 142, 107440.	1.8	6
7	Effect of single roll drive cross rolling on the microstructure, crystallographic texture, and mechanical behavior of Alâ€“Znâ€“Mgâ€“Cu alloy. Archives of Civil and Mechanical Engineering, 2022, 22, 1.	1.9	8
8	Effects of pre- and post-friction surfacing heat treatment on microstructure and corrosion behavior of nickel-aluminide reinforced Al-Cu-Mg alloy. Journal of Alloys and Compounds, 2022, 906, 164211.	2.8	18
9	Evaluating of the microstructure, texture, and mechanical properties of AA2024-Al3NiCu composites fabricated by the stir casting process. CIRP Journal of Manufacturing Science and Technology, 2022, 37, 204-218.	2.3	5
10	Effect of friction surfacing parameters on the microstructural, mechanical properties, and wear characteristic of Al-Cu-Mg alloy coating reinforced by nickel aluminide. Archives of Civil and Mechanical Engineering, 2022, 22, 1.	1.9	2
11	Effect of copper reinforcement on the microstructure, macrotexture, and wear properties of a friction-surfaced Al-Cu-Mg coating. Surface and Coatings Technology, 2022, 438, 128380.	2.2	7
12	Fabrication of a PEO-PVDF blend based polymer composite electrolyte with extremely high ionic conductivity via the addition of LLTO nanowires. Solid State Ionics, 2022, 377, 115885.	1.3	8
13	Resistance spot welding of high-strength DP steel and nano/ultrafine-grained IF steel sheets. Materials Chemistry and Physics, 2022, 281, 125909.	2.0	10
14	Friction stir cladding of commercially pure titanium on 304 stainless steel. Welding in the World, Le Soudage Dans Le Monde, 2022, 66, 1781-1798.	1.3	1
15	Microstructural and residual stress analysis of functionally graded friction surfaced Al-Cu-Mg-Ag alloy. CIRP Journal of Manufacturing Science and Technology, 2022, 38, 684-694.	2.3	1
16	Investigation of Friction-Stir Welding Parameters in the Fabrication of a 2-Layer Aluminumâ€“Copper Pipe with Monolithic Interface. Transactions of the Indian Institute of Metals, 2021, 74, 285-300.	0.7	4
17	A new method to produce dual-phase steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 803, 140695.	2.6	11
18	Small-scale resistance seam welding of 304 stainless steel with capacitor discharge welding machine. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2021, 235, 1154-1167.	1.5	0

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19	Simultaneous enhancement of strength and ductility in ferrite-martensite steel via increasing the martensite fraction. Materials Chemistry and Physics, 2021, 259, 124204.	2.0	18
20	Cellular automaton modeling of dynamic recrystallization in Al-Mg alloy coating fabricated using the friction surfacing process. Surface and Coatings Technology, 2021, 407, 126784.	2.2	13
21	Smallâ€scale resistance seam welding of stainless steel bipolar plates of PEM fuel cells. International Journal of Energy Research, 2021, 45, 13822-13835.	2.2	2
22	Effects of pre-heat treatment of the consumable rod on the microstructural and mechanical properties of the friction surfaced Al-Cu-Mg alloy over pure aluminum. Surface and Coatings Technology, 2021, 410, 126954.	2.2	17
23	The effect of heat treatment and cooling conditions on friction stir processing of A390-10Âwt% SiC aluminium matrix composite. Materials Chemistry and Physics, 2021, 263, 124423.	2.0	26
24	Effect of mechtrode rotational speed on friction surfacing of AA2024 on AA1050 substrate. CIRP Journal of Manufacturing Science and Technology, 2021, 33, 209-221.	2.3	20
25	Effects of Multipass Additive Friction Stir Processing on Microstructure and Mechanical Properties of Al-Zn-Cup/Al-Zn Laminated Composites. Jom, 2021, 73, 2844-2858.	0.9	2
26	Fabrication of the laminated Al-Zn-Cup/Al-Zn composite using friction stir additive manufacturing. Materials Today Communications, 2021, 27, 102268.	0.9	10
27	AA3105/SiC composites fabricated by sandwich method: effect of overlapping. Sadhana - Academy Proceedings in Engineering Sciences, 2021, 46, 1.	0.8	1
28	Effect of traverse and rotational speeds on microstructure, texture, and mechanical properties of friction stir processed AZ91 alloy. Materials Characterization, 2021, 178, 111235.	1.9	31
29	Comprehensive thermo-mechanical simulation of friction surfacing of aluminum alloys using smoothed particle hydrodynamics method. Surface and Coatings Technology, 2021, 419, 127274.	2.2	8
30	Effect of friction surfacing parameters on microstructure and mechanical properties of solid-solutionized AA2024 aluminium alloy cladded on AA1050. Materials Chemistry and Physics, 2021, 269, 124756.	2.0	17
31	Asymmetric cold rolling of AA7075 alloy: The evolution of microstructure, crystallographic texture, and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 824, 141801.	2.6	39
32	Microstructure and mechanical properties of AA7075/Al3Ni composites produced by compocasting. Materials Today Communications, 2021, 28, 102537.	0.9	9
33	Pre-strain assisted low heat-input friction stir processing to achieve ultrafine-grained copper. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 826, 141958.	2.6	14
34	Fabrication of a laminated aluminium matrix composite using friction stir processing as a cladding method. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 272, 115326.	1.7	13
35	Hot tensile deformation and fracture behavior of friction stir processed Al-Si-Cu alloy. CIRP Journal of Manufacturing Science and Technology, 2021, 35, 41-52.	2.3	7
36	Effects of Ni on the microstructure, mechanical and tribological properties of AA2024-Al3NiCu composite fabricated by stir casting process. Journal of Alloys and Compounds, 2021, 887, 161433.	2.8	18

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37	Friction Stir Processing of AA3105/SiC Composites Constructed Through the Sandwich Method: The Effects of FSP Variables. Transactions of the Indian Institute of Metals, 2021, 74, 429-438.	0.7	5
38	Theoretical and experimental studies on fabrication of two-layer aluminumâ˜copper pipe by friction stir additive manufacturing. Transactions of Nonferrous Metals Society of China, 2021, 31, 3643-3658.	1.7	8
39	In-situ fabrication of TiC-Al2O3 and TiB2-TiC-Al2O3 composite coatings on 304 stainless steel surface using GTAW process. Metallic Materials, 2020, 57, 177-188.	0.2	4
40	Effects of Zn powder on alloying during friction surfacing of Alâ€“Mg alloy. Journal of Alloys and Compounds, 2020, 818, 152823.	2.8	18
41	Effect of non-isothermal aging on microstructure and mechanical properties of friction surfaced AA5083-15wt%Zn composites. Surface and Coatings Technology, 2020, 384, 125307.	2.2	13
42	Microstructure and mechanical properties of IF/St52 steel composite produced by friction stir lap welding. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 772, 138775.	2.6	12
43	Statistical modelling and optimization of friction stir processing of A390-10Âwt% SiC compo-cast composites. Measurement: Journal of the International Measurement Confederation, 2020, 165, 108166.	2.5	11
44	Microstructural characterization and mechanical properties of friction surfaced AA2024â˜Ag composites. Transactions of Nonferrous Metals Society of China, 2020, 30, 1756-1770.	1.7	18
45	Microstructural, tribological, and texture analysis of friction surfaced Al-Mg-Cu clad on AA1050 alloy. Surface and Coatings Technology, 2020, 397, 125980.	2.2	12
46	Effect of post-heat treatment on friction surfaced Al-Cu-Mg alloy coating containing Ag. Surface and Coatings Technology, 2020, 397, 125984.	2.2	11
47	Fabrication of a 2-layer laminated steel composite by friction stir additive manufacturing. Journal of Manufacturing Processes, 2020, 51, 110-121.	2.8	29
48	A novel method for manufacturing microchannels of metallic bipolar plate fuel cell by the hot metal gas forming process. Journal of Manufacturing Processes, 2020, 55, 268-275.	2.8	20
49	A new 1.2ÂGPa-strength plain low carbon steel with high ductility obtained by SRDR of martensite and intercritical annealing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 788, 139584.	2.6	22
50	Phase-field microstructure simulation during aluminum alloy friction surfacing. Surface and Coatings Technology, 2020, 402, 126496.	2.2	11
51	The effect of pulse frequency on the microstructure and surface mechanical properties of composite coatings on the surface of AISI304. International Journal of Materials Research, 2020, 111, 237-245.	0.1	0
52	Mechanical alloying by friction surfacing process. Materials Letters, 2019, 254, 394-397.	1.3	17
53	Sandwich Method: Strategy to Fabricate Al/SiC Composites by FSP. Transactions of the Indian Institute of Metals, 2019, 72, 3249-3259.	0.7	5
54	Evaluation of different heat treatment cycles on improving single point incremental forming of AA6061 aluminum alloy. International Journal of Advanced Manufacturing Technology, 2019, 105, 83-100.	1.5	8

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55	Modeling and experimental investigation on friction surfacing of aluminum alloys. Journal of Alloys and Compounds, 2019, 805, 57-68.	2.8	37
56	Effect of silver on non-isothermal aging of friction surfaced AA2024-16â€¯wt%Ag composites. Surface and Coatings Technology, 2019, 379, 125059.	2.2	30
57	Microstructure, mechanical and tribological properties of A390/SiC composite produced by compocasting. Transactions of Nonferrous Metals Society of China, 2019, 29, 710-721.	1.7	23
58	Effect of reverse dual rotation process on properties of friction stir welding of AA7075 to AISI304. Transactions of Nonferrous Metals Society of China, 2019, 29, 964-975.	1.7	12
59	Modeling and experimental study of friction surfacing of AA2024 alloy over AA1050 plates. Materials Research Express, 2019, 6, 0865g2.	0.8	26
60	Evaluating the microstructure and mechanical properties of friction stir processed Alâ€“Si alloy. Materials Science and Technology, 2019, 35, 1061-1070.	0.8	14
61	Effect of SiC nanoparticles on the microstructure and texture of friction stir welded AA2024/AA6061. Materials Characterization, 2019, 152, 169-179.	1.9	47
62	The study of thermomechanical and microstructural issues in dissimilar FSW of AA6061 wrought and A390 cast alloys. Journal of Manufacturing Processes, 2019, 41, 168-176.	2.8	26
63	An investigation on thermo-mechanical and microstructural issues in friction surfacing of Alâ€“Cu aluminum alloys. Materials Research Express, 2019, 6, 056550.	0.8	35
64	Effect of tool pin geometry and weld pass number on microstructural, natural aging and mechanical behaviour of SiC-incorporated dissimilar friction-stir-welded aluminium alloys. Sadhana - Academy Proceedings in Engineering Sciences, 2019, 44, 1.	0.8	9
65	Tearing criterion and process window of hot metal gas forming for AA6063 cylindrical stepped tubes. International Journal of Advanced Manufacturing Technology, 2019, 101, 2609-2620.	1.5	4
66	Numerical and experimental investigation on influence of initial microstructure on GTA-welded age-hardened AA2024. International Journal of Advanced Manufacturing Technology, 2018, 97, 1335-1346.	1.5	3
67	Microstructure and texture evolution of friction stir welded dissimilar aluminum alloys: AA2024 and AA6061. Journal of Manufacturing Processes, 2018, 32, 1-10.	2.8	108
68	Microstructure and mechanical properties in nano and microscale SiC-included dissimilar friction stir welding of AA6061-AA2024. Materials Science and Technology, 2018, 34, 388-401.	0.8	17
69	Microstructural evolution and mechanical properties of friction stir-welded C71000 copperâ€“nickel alloy and 304 austenitic stainless steel. International Journal of Minerals, Metallurgy and Materials, 2018, 25, 1294-1303.	2.4	12
70	Analysis of welding parameters effects on microstructural and mechanical properties of Ti6Al4V and AA5052 dissimilar joint. Journal of Mechanical Science and Technology, 2018, 32, 3371-3377.	0.7	10
71	Orbital friction stir lap welding in tubular parts of aluminium alloy AA5083. Science and Technology of Welding and Joining, 2017, 22, 562-572.	1.5	10
72	Effect of welding heat input and post-weld aging time on microstructure and mechanical properties in dissimilar friction stir welded AA7075â€“AA5086. Transactions of Nonferrous Metals Society of China, 2017, 27, 1707-1715.	1.7	32

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73	Effect of pre and post welding heat treatment in SiC-fortified dissimilar AA6061-AA2024 FSW butt joint. Journal of Manufacturing Processes, 2017, 30, 97-105.	2.8	55
74	Effect of welding parameters on microstructure, mechanical properties and residual stress fields of friction stirwelds on AA5086. Metallic Materials, 2016, 53, 51-58.	0.2	6
75	A Study on Flow Behavior of AA5086 Over a Wide Range of Temperatures. Journal of Materials Engineering and Performance, 2016, 25, 1076-1084.	1.2	21
76	Analysis of process parameters effects on dissimilar friction stir welding of AA1100 and A441 AISI steel. Science and Technology of Welding and Joining, 2015, 20, 553-562.	1.5	76
77	Microstructure and residual stress distributions in friction stir welding of dissimilar aluminium alloys. Materials and Design, 2015, 87, 405-413.	3.3	95
78	Influences of pin profile on the mechanical and microstructural behaviors in dissimilar friction stir welded AA6082â€“AA7075 butt Joint. Materials & Design, 2015, 67, 413-421.	5.1	74
79	A study on natural aging behavior and mechanical properties of friction stir-welded AA6061-T6 plates. International Journal of Advanced Manufacturing Technology, 2014, 71, 933-941.	1.5	31
80	Microstructural evolution and mechanical properties of friction stir welded AA2017 with different initial microstructures. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2014, 228, 34-44.	0.7	1
81	An Investigation into the Microstructure of Friction-Stir Welded and Artificially Aged AA2017. Journal of Materials Engineering and Performance, 2013, 22, 3566-3571.	1.2	4
82	A study on microstructures and residual stress distributions in dissimilar friction-stir welding of AA5086â€“AA6061. Journal of Materials Science, 2012, 47, 5428-5437.	1.7	27
83	Experimental and theoretical evaluations of thermal histories and residual stresses in dissimilar friction stir welding of AA5086-AA6061. International Journal of Advanced Manufacturing Technology, 2012, 61, 149-160.	1.5	54
84	Evolution of microstructures and mechanical properties in similar and dissimilar friction stir welding of AA5086 and AA6061. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 8071-8083.	2.6	89
85	Thermo-mechanical and microstructural issues in dissimilar friction stir welding of AA5086â€“AA6061. Journal of Materials Science, 2011, 46, 3258-3268.	1.7	47
86	Theoretical and experimental investigation into friction stir welding of AA 5086. International Journal of Advanced Manufacturing Technology, 2011, 52, 531-544.	1.5	55
87	An investigation of the microstructures and properties of metal inert gas and friction stir welds in aluminum alloy 5083. Sadhana - Academy Proceedings in Engineering Sciences, 2011, 36, 505-514.	0.8	19
88	Effect of tool geometry on mechanical and microstructural behaviours in dissimilar friction stir welding of AA 5086â€“AA 6061. Science and Technology of Welding and Joining, 2011, 16, 597-604.	1.5	45
89	The influence of tool geometry on the thermo-mechanical and microstructural behaviour in friction stir welding of AA5086. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2011, 225, 1-16.	1.1	21
90	Prediction of Grain Growth Behavior in HAZ During Gas Tungsten Arc Welding of 304 Stainless Steel. Journal of Materials Engineering and Performance, 2009, 18, 1193-1200.	1.2	14

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91	Theoretical and experimental study of microstructures and weld pool geometry during GTAW of 304 stainless steel. International Journal of Advanced Manufacturing Technology, 2009, 42, 1043-1051.	1.5	51
92	An experimental and theoretical investigation of thermo-mechanical issues in friction surfacing of Al-Mg aluminium alloys: material flow and residual stress. Modelling and Simulation in Materials Science and Engineering, 0, , .	0.8	7
93	Statistical Modeling and Optimization of Two-Layer Aluminumâ€“Copper Pipe Fabrication by Friction Stir Welding. Transactions of the Indian Institute of Metals, 0, , 1.	0.7	1