Yu-feng Sun

List of Publications by Year
in descending order

121 papers	3,094 citations	136950 32 h-index	182427 51 g-index
121 all docs	121 docs citations	121 times ranked	1973 citing authors

#	Article	IF	Citations
1	Microstructure and mechanical properties of dissimilar Al alloy/steel joints prepared by a flat spot friction stir welding technique. Materials & Design, 2013, 47, 350-357.	5.1	179
2	The effect of SiC particles on the microstructure and mechanical properties of friction stir welded pure copper joints. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 5470-5475.	5.6	152
3	Homogeneous corrosion of high pressure torsion treated Mgâ€“Znâ€“Ca alloy in simulated body fluid. Materials Letters, 2011, 65, 691-693.	2.6	120
4	Investigation of welding parameter dependent microstructure and mechanical properties in friction stir welded pure Ti joints. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 3386-3391.	5.6	114
5	Investigation of the welding parameter dependent microstructure and mechanical properties of friction stir welded pure copper. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 6879-6886.	5.6	105
6	Plasticity-improved Zrâ€“Cuâ€“Al bulk metallic glass matrix composites containing martensite phase. Applied Physics Letters, 2005, 87, 051905.	3.3	91
7	Friction-stir welding of a ductile high entropy alloy: microstructural evolution and weld strength. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 711, 524-532.	5.6	82
8	Flexible control of the microstructure and mechanical properties of friction stir welded Tiâ€“6Alâ€“4V joints. Materials & Design, 2013, 46, 348-354.	5.1	80
9	Microstructure and mechanical properties of S45C steel prepared by laser-assisted friction stir welding. Materials & Design, 2013, 47, 842-849.	5.1	72
10	Friction stir welding of a CoCrFeNiAl0.3 high entropy alloy. Materials Letters, 2017, 205, 142-144.	2.6	72
11	Fine grained Mgâ€“3Alâ€“1Zn alloy with randomized texture in the double-sided friction stir welded joints. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 580, 83-91.	5.6	71
12	Mechanical properties of friction stir butt welds of high nitrogen-containing austenitic stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 2917-2921.	5.6	65
13	Clarification of microstructure evolution of aluminum during friction stir welding using liquid CO2 rapid cooling. Materials and Design, 2017, 129, 151-163.	7.0	64
14	Microstructure and mechanical properties of mild steel joints prepared by a flat friction stir spot welding technique. Materials & Design, 2012, 37, 384-392.	5.1	61
15	Spot friction stir welding of low carbon steel plates preheated by high frequency induction. Materials & Design, 2014, 54, 450-457.	5.1	60
16	Effect of initial grain size on the joint properties of friction stir welded aluminum. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 527, 317-321.	5.6	57
17	Evaluation of dynamic development of grain structure during friction stir welding of pure copper using a quasi in situ method. Journal of Materials Science and Technology, 2019, 35, 1412-1421.	10.7	56
18	The microstructure and mechanical properties of friction stir welded Cuâ€“30Zn brass alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 589, 228-234.	5.6	51

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19	Effect of gap on FSW joint formation and development of friction powder processing. Science and Technology of Welding and Joining, 2010, 15, 131-136.	3.1	49
20	Effect of grain size on the microstructure and mechanical properties of friction stir welded non-combustive magnesium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 549, 176-184.	5.6	45
21	Stacking-fault energy, mechanical twinning and strain hardening of Fe-18Mn-0.6C-(0, 1.5)Al twinning-induced plasticity steels during friction stir welding. Acta Materialia, 2018, 148, 235-248.	7.9	45
22	Cu/Zr nanoscaled multi-stacks fabricated by accumulative roll bonding. Journal of Alloys and Compounds, 2010, 504, S443-S447.	5.5	44
23	Dynamics of rotational flow in friction stir welding of aluminium alloys. Journal of Materials Processing Technology, 2018, 252, 643-651.	6.3	43
24	Microstructural Characteristics and Mechanical Properties of Friction Stir Welded Thick 5083 Aluminum Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 208-229.	2.2	42
25	Microstructure and mechanical properties of friction stir welded joint of Zr55Cu30Al10Ni5 bulk metallic glass with pure copper. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 3427-3432.	5.6	41
26	Friction stir welding of AISI 1080 steel using liquid CO₂ for enhanced toughness and ductility. Science and Technology of Welding and Joining, 2013, 18, 500-506.	3.1	40
27	Serrated plastic flow during nanoindentation in Nd-based bulk metallic glasses. Intermetallics, 2004, 12, 1239-1243.	3.9	39
28	Ultrafine grained structure and improved mechanical properties of low temperature friction stir spot welded 6061-T6 Al alloys. Materials Characterization, 2018, 135, 124-133.	4.4	36
29	Microstructure and mechanical properties of friction stir welded pure Mo joints. Scripta Materialia, 2011, 64, 657-660.	5.2	35
30	Effect of process parameters on microstructure and mechanical properties of friction stir welded CoCrFeNi high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 782, 139277.	5.6	35
31	Optimization of mechanical properties of fine-grained non-combustive magnesium alloy joint by asymmetrical double-sided friction stir welding. Journal of Materials Processing Technology, 2017, 242, 117-125.	6.3	34
32	Investigation of temperature dependent microstructure evolution of pure iron during friction stir welding using liquid CO2 rapid cooling. Materials Characterization, 2018, 137, 24-38.	4.4	33
33	Effect of Nb content on the microstructure and mechanical properties of Zrâ€“Cuâ€“Niâ€“Alâ€“Nb glass forming alloys. Journal of Alloys and Compounds, 2005, 403, 239-244.	5.5	32
34	Fabrication of CuZr(Al) bulk metallic glasses by high pressure torsion. Intermetallics, 2009, 17, 256-261.	3.9	32
35	Deformation characteristics and microstructural evolution in friction stir welding of thick 5083 aluminum alloy. International Journal of Advanced Manufacturing Technology, 2018, 99, 663-681.	3.0	32
36	Fabrication of Fe-Based Metallic Glass Particle Reinforced Al-Based Composite Materials by Friction Stir Processing. Materials Transactions, 2011, 52, 1634-1640.	1.2	31

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37	Novel spot friction stir welding of 6061 and 5052 Al alloys. Science and Technology of Welding and Joining, 2011, 16, 605-612.	3.1	30
38	Microstructure-property relation and evolution in friction stir welding of naturally aged 6063 aluminium alloy. International Journal of Advanced Manufacturing Technology, 2017, 91, 1753-1769.	3.0	30
39	Effect of Stacking Fault Energy on the Grain Structure Evolution of FCC Metals During Friction Stir Welding. Acta Metallurgica Sinica (English Letters), 2020, 33, 1001-1012.	2.9	30
40	Critical strain for mechanical alloying of Cuâ€“Ag, Cuâ€“Ni and Cuâ€“Zr by high-pressure torsion. Scripta Materialia, 2011, 65, 489-492.	5.2	29
41	Interface microstructure evolution of dissimilar friction stir butt welded F82H steel and SUS304. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 5812-5821.	5.6	29
42	Effect of abnormal grain growth on microstructure and mechanical properties of friction stir welded SPCC steel plates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 694, 81-92.	5.6	29
43	Friction stir spot welding of SPCC low carbon steel plates at extremely low welding temperature. Journal of Materials Science and Technology, 2019, 35, 733-741.	10.7	29
44	Suppression of hydrogen-induced damage in friction stir welded low carbon steel joints. Corrosion Science, 2015, 94, 88-98.	6.6	27
45	Strain rate dependent micro-texture evolution in friction stir welding of copper. Materialia, 2019, 6, 100302.	2.7	23
46	The unexpected stress-strain response of medium Mn steel after friction stir welding. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 744, 340-348.	5.6	22
47	Microstructural evolution and mechanical properties of nanostructured Cu/Ni multilayer fabricated by accumulative roll bonding. Journal of Alloys and Compounds, 2020, 819, 152956.	5.5	22
48	Formation, thermal stability and deformation behavior of graphite-flakes reinforced Cu-based bulk metallic glass matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 435-436, 132-138.	5.6	21
49	Microstructure and mechanical properties of spot friction stir welded ultrafine grained 1050 Al and conventional grained 6061-T6 Al alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 585, 17-24.	5.6	21
50	Flat friction stir spot welding of three 6061-T6 aluminum sheets. Journal of Materials Processing Technology, 2019, 264, 414-421.	6.3	21
51	Double-sided friction stir welding of 40 mm thick low carbon steel plates using a pcBN rotating tool. Journal of Manufacturing Processes, 2020, 50, 319-328.	5.9	21
52	Stress-induced martensitic transformations in CuZrAl bulk metallic glass forming alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 479, 31-36.	5.6	20
53	A biodegradable magnesium alloy vascular stent structure: Design, optimisation and evaluation. Acta Biomaterialia, 2022, 142, 402-412.	8.3	20
54	Microstructure and Mechanical Properties of Dissimilar Friction Stir Welding between Ultrafine Grained 1050 and 6061-T6 Aluminum Alloys. Metals, 2016, 6, 249.	2.3	18

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55	Dynamic recrystallization phenomena during laser-assisted friction stir processing of a precipitation hardened nickel base superalloy. Journal of Alloys and Compounds, 2016, 685, 806-811.	5.5	18
56	Solid-state amorphization of Cu + Zr multi-stacks by ARB and HPT techniques. Journal of Materials Science, 2008, 43, 7457-7464.	3.7	17
57	Friction stir welding of multi-walled carbon nanotubes reinforced Al matrix composites. Materials Characterization, 2018, 145, 653-663.	4.4	17
58	Brittleness of Zr-based bulk metallic glass matrix composites containing ductile dendritic phase. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 406, 57-62.	5.6	16
59	Enhanced Plasticity of Zr-based Bulk Metallic Glass Matrix Composite with Ductile Reinforcement. Journal of Materials Research, 2005, 20, 2386-2390.	2.6	16
60	Influence of the second phase on protein adsorption on biodegradable Mg alloysâ€™ surfaces: Comparative experimental and molecular dynamics simulation studies. Acta Biomaterialia, 2021, 129, 323-332.	8.3	16
61	Fabrication of ZrAlNiCu bulk metallic glass composites containing pure copper particles by high-pressure torsion. Journal of Alloys and Compounds, 2010, 492, 149-152.	5.5	15
62	Microstructure and mechanical properties of Zr-Cu-Al bulk metallic glasses. Transactions of Nonferrous Metals Society of China, 2007, 17, 929-933.	4.2	14
63	Friction Stir Welding of Zr₅₅Cu₃₀Ni₅Al₁₀ Bulk Metallic Glass. Materials Transactions, 2009, 50, 1300-1303.	1.2	14
64	Microstructure and mechanical properties of dissimilar spot friction stir welded Zr55Cu30Al10Ni5 bulk metallic glass to pure copper. Intermetallics, 2013, 33, 113-119.	3.9	14
65	Bio-inspired porous helical carbon fibers with ultrahigh specific surface area for super-efficient removal of sulfamethoxazole from water. Journal of Colloid and Interface Science, 2020, 578, 304-314.	9.4	14
66	Effect of quasicrystalline phase on the deformation behavior of Zr62Al9.5Ni9.5Cu14Nb5 bulk metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 398, 22-27.	5.6	13
67	Compressive and tensile properties of CuZrAl alloy plates containing martensitic phases. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 517, 375-380.	5.6	13
68	Fabrication of Bulk Metallic Glass Sheet in Cu-47 at% Zr Alloys by ARB and Heat Treatment. Materials Transactions, 2007, 48, 1605-1609.	1.2	11
69	Effect of Al addition on formation and mechanical properties of Mg-Cu-Gd bulk metallic glass. Transactions of Nonferrous Metals Society of China, 2007, 17, 907-912.	4.2	11
70	Interface shape and microstructure controlled dissimilar friction stir lap welded steels. Science and Technology of Welding and Joining, 2013, 18, 279-286.	3.1	11
71	Fatigue Fracture Mechanism on Friction Stir Spot Welded Joints Using 300 MPa-class Automobile Steel Sheets under Constant and Variable Force Amplitude. , 2014, 3, 537-543.		11
72	Local inhomogeneity of mechanical properties in stir zone of friction stir welded AA1050 aluminum alloy. Transactions of Nonferrous Metals Society of China, 2020, 30, 2369-2380.	4.2	11

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73	Simulated and reconstructed winter temperature in the eastern China during the last millennium. Science Bulletin, 2005, 50, 2872-2877.	9.0	10
74	Fatigue Damage Evaluation of Friction Stir Spot Welded Cross-Tension Joints Under Repeated Two-Step Force Amplitudes. Journal of Materials Engineering and Performance, 2015, 24, 2494-2502.	2.5	9
75	Improved resistance to hydrogen embrittlement ofÂfriction stir welded high carbon steel plates. International Journal of Hydrogen Energy, 2015, 40, 8219-8229.	7.1	9
76	Microstructural Evolution and Mechanical Properties of Graphene Oxide-Reinforced Ti6Al4V Matrix Composite Fabricated Using Spark Plasma Sintering. Nanomaterials, 2021, 11, 1440.	4.1	9
77	Microstructure and properties of biodegradable Mgâ€"Znâ€"Y-Nd alloy micro-tubes prepared by an improved method. Journal of Alloys and Compounds, 2020, 835, 155369.	5.5	8
78	Optimizing structural design on biodegradable magnesium alloy vascular stent for reducing strut thickness and raising radial strength. Materials and Design, 2022, 220, 110843.	7.0	8
79	Kinetics of Glass Transition and Crystallization in Carbon Nanotube Reinforced Mg-Cu-Gd Bulk Metallic Glass. Journal of Rare Earths, 2006, 24, 327-331.	4.8	7
80	<i>In Vitro</i> Degradation of Ultrafine Grained Mg-Zn-Ca Alloy by High-Pressure Torsion in Simulated Body Fluid. Materials Science Forum, 0, 706-709, 504-509.	0.3	6
81	Friction Stir Welding of Thick Aluminium Weldsâ€"Challenges and Perspectives. Minerals, Metals and Materials Series, 2017, , 119-124.	0.4	6
82	Preparation of Biodegradable Mg/Î²-TCP Biofunctional Gradient Materials by Friction Stir Processing and Pulse Reverse Current Electrodeposition. Acta Metallurgica Sinica (English Letters), 2020, 33, 103-114.	2.9	6
83	Significantly improved corrosion resistance of Zn layer coated Mg alloy prepared by friction stir processing. Materials Letters, 2021, 289, 129389.	2.6	6
84	Formation mechanism and morphology-dependent luminescence of NdF₃nanoplates with cavities. CrystEngComm, 2017, 19, 2487-2493.	2.6	5
85	Friction Stir Welding of Medium Carbon Steel with Laser-Preheating. ISIJ International, 2020, 60, 153-159.	1.4	5
86	The effect of Zn coating layer on the microstructure and mechanical properties of friction stir spot welded galvanized DP590 high-strength steel plates. International Journal of Advanced Manufacturing Technology, 2021, 113, 1787-1798.	3.0	5
87	Microstructure, mechanical properties and corrosion fatigue behaviour of biodegradable Mgâ€"Znâ€"Yâ€"Nd alloy prepared by double extrusion. Corrosion Engineering Science and Technology, 2021, 56, 584-593.	1.4	5
88	Influence of Silicon Additions on the Microstructure and Mechanical Properties of Cu₄₇Ti₃₄Zr₁₁Ni₈ Bulk Metallic Glass Forming Alloys. Materials Transactions, 2007, 48, 1350-1354.	1.2	4
89	Effect of Welding Parameters on the Hydrogen Embrittlement of Cathodic Hydrogen-Charged Friction Stir Welded High Carbon Steel Joints. Corrosion, 2015, 71, 923-936.	1.1	4
90	Oxalic Acid-Assisted Hydrothermal Synthesis and Luminescent of Hexagonal NaYF4:Ln3+ (Ln = Sm, Eu,) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.7	4

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91	Surface solid-state amorphization of accumulative roll bonded Cu-Zr laminates by friction stir processing. Materials Letters, 2020, 279, 128518.	2.6	4
92	Clarifying effect of welding conditions on microstructure and mechanical properties of friction stir spot-welded DH590 automotive high-strength steel plates. Journal of Iron and Steel Research International, 2021, 28, 232-243.	2.8	4
93	Structural characterization and mechanical properties of nanocrystal-containing Cuâ€“Ti-based bulk metallic glass-forming alloys. Journal of Materials Research, 2007, 22, 352-357.	2.6	3
94	3-Dimensional observation of the interior fatigue fracture mechanism on friction stir spot welded using 300MPa-class automobile steel sheets. , 2013, , 435-442.		3
95	Microstructures and Properties of Biological Mg-Zn-Y-Nd Alloy by Friction Stir Processing. Materials Science Forum, 0, 745-746, 33-38.	0.3	3
96	Recent Patented Hybrid Techniques for Friction Stir Welding of Metallic Materials. Recent Patents on Mechanical Engineering, 2010, 3, 206-210.	0.3	3
97	Microstructure and Mechanical Properties of Friction Stir Welded 1.5 GPa Martensitic High-Strength Steel Plates. Acta Metallurgica Sinica (English Letters), 0, , 1.	2.9	3
98	Varied linear phason strain and its induced domain structure in quasicrystalline precipitates of Zrâ€“Alâ€“Niâ€“Cuâ€“Nb bulk metallic glass matrix composites. Journal of Materials Research, 2012, 27, 3041-3048.	2.6	2
99	Interface Microstructure and Mechanical Properties of Dissimilar Friction Stir Welded Joints between Zr₅₅Cu₃₀Ni₅Al₁₀ Bulk Metallic Glass and Pure Al. Materials Transactions, 2012, 53, 1106-1112.	1.2	2
100	Phason strained quasicrystalline and crystalline precipitates in Zrâ€“Alâ€“Niâ€“Cuâ€“Nb bulk metallic glass matrix composites. Journal of Non-Crystalline Solids, 2012, 358, 3007-3011.	3.1	2
101	Non-centro-symmetric electron diffraction pattern of icosahedral quasicrystal induced by combination of linear phason strain and curvature of Ewald sphere. Micron, 2013, 52-53, 45-48.	2.2	2
102	Friction powder compaction process for fabricating porous Cu by space holder route. , 2013, , 401-405.		2
103	Synthesis and enhancement luminescence of 3D NaReF4 (Re = Eu, Sm) hierarchical microstructures assembled by nanosheets. CrystEngComm, 2018, 20, 512-519.	2.6	2
104	Friction Stir Welding of Medium Carbon Steel with Laser-Preheating. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2018, 104, 369-376.	0.4	2
105	Simulation of dynamic recrystallization behavior of hot extruded Mg-Zn-Y-Nd alloy tubes by the finite element method. Materials Today Communications, 2021, 27, 102384.	1.9	2
106	In situ synthesis of TiC reinforced Cu47Ti34Zr11Ni8 bulk metallic glass composites. Science Bulletin, 2004, 49, 542.	1.7	1
107	Effect of Nb addition on the subsurface deformation behavior in Cu47Ti34Zr11Ni8 bulk metallic glasses through Vickers indentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 520, 11-15.	5.6	1
108	Fabrication of Fe Based Metallic Glass Particles Reinforced Al Based Composite Materials by Friction Stir Processing. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2011, 75, 47-54.	0.4	1

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109	Mechanical properties of friction stir welded high nitrogen containing austenitic stainless steel. , 2013, , 95-100.		1
110	Fabrication of CuAl₂ <i>in-situ</i> Formation and Dispersed Porous Aluminum Core Filled in Hollow Pipe Composite Materials. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2013, 79, 1071-1075.	0.2	1
111	Title is missing!. Journal of Materials Science Letters, 2001, 20, 1993-1994.	0.5	0
112	Effect of Solidification Process on Magnetic Properties of Nd-Based Bulk Amorphous Forming Alloy. Journal of Metastable and Nanocrystalline Materials, 2004, 20-21, 685-689.	0.1	0
113	The Possibility of Friction Stir Welding of High Nitrogen-containing Austenitic Stainless Steel. International Journal of the Society of Materials Engineering for Resources, 2010, 17, 197-200.	0.1	0
114	Hydrogen embrittlement of friction stir welded SK4 high carbon steel plates. , 2013, , 101-105.		0
115	Minor metal reduction of high tensile strength steel by friction stir welding. , 2013, , 115-117.		0
116	Varied linear phason strain and its induced domain structure in quasicrystalline precipitates of Zr-Al-Ni-Cu-Nb bulk metallic glass matrix composites â€“ CORRIGENDUM. Journal of Materials Research, 2013, 28, 658-658.	2.6	0
117	Fabrication of Porous Aluminum / Thin-Walled Pipe Composite Materials by Applying Friction Welding. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2013, 79, 1066-1070.	0.2	0
118	Fabrication of Porous Copper with Uniform Pore Size by Friction Powder Compaction Process. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2013, 79, 1079-1082.	0.2	0
119	Effect of Fe content on the thermal stability and dynamic mechanical behavior of NdAlNiCu bulk metallic glasses. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 385, 397-401.	5.6	0
120	Friction Stir Processed High Purity Mg Coating on MgZnYNd Alloy with Improved Corrosion Resistance. Journal of Materials Engineering and Performance, 0, , 1.	2.5	0
121	Improving Adhesion Strength and Electrical Conductivity of Cold-Sprayed Al Deposit on Cu Substrate Through Friction-Stir-Processing. Journal of Thermal Spray Technology, 0, , 1.	3.1	0