Jian-Fei Sun

List of Publications by Year
in descending order

85	1,436	393982	360668
papers	citations	19 h-index	35 g-index

86	86	86	1124
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bulk metallic glasses: Smaller is softer. Applied Physics Letters, 2007, 90, 081919.	1.5	208
2	Selective laser melting of H13: microstructure and residual stress. Journal of Materials Science, 2017, 52, 12476-12485.	1.7	127
3	Excellent magnetocaloric properties of melt-extracted Gd-based amorphous microwires. Applied Physics Letters, 2012, 101, .	1.5	91
4	Plasticity of a TiCu-based bulk metallic glass: Effect of cooling rate. Journal of Materials Research, 2007, 22, 3067-3074.	1.2	81
5	A CuZr-based bulk metallic glass composite with excellent mechanical properties by optimizing microstructure. Journal of Non-Crystalline Solids, 2018, 483, 94-98.	1.5	54
6	Fabrication and Characterization of Melt-Extracted Co-Based Amorphous Wires. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 1103-1108.	1.1	46
7	Formation of nanowaves in compressive fracture of a less-brittle bulk metallic glass. Applied Physics Letters, 2006, 89, 121908.	1.5	43
8	Enhanced magnetocaloric and mechanical properties of melt-extracted Gd55Al25Co20 micro-fibers. Journal of Alloys and Compounds, 2014, 603, 167-171.	2.8	41
9	In-situ tensile testing of ZrCu-based metallic glass composites. Scientific Reports, 2018, 8, 4651.	1.6	32
10	316L Stainless Steel Manufactured by Selective Laser Melting and Its Biocompatibility with or without Hydroxyapatite Coating. Metals, 2018, 8, 548.	1.0	31
11	A computational fluid dynamics (CFD) investigation of the flow field and the primary atomization of the close coupled atomizer. Computers and Chemical Engineering, 2012, 40, 58-66.	2.0	28
12	Size dependent phase transformation in atomized TiAl powders. Intermetallics, 2015, 61, 72-79.	1.8	28
13	Enhancing the magnetocaloric response of high-entropy metallic-glass by microstructural control. Science China Materials, 2022, 65, 1134-1142.	3.5	24
14	Relating surface roughness and magnetic domain structure to giant magneto-impedance of Co-rich melt-extracted microwires. Scientific Reports, 2017, 7, 46253.	1.6	23
15	Atomic structure evolution of high entropy metallic glass microwires at cryogenic temperature. Scripta Materialia, 2019, 163, 29-33.	2.6	23
16	Multiangle combined magneticâ€field annealing of Coâ€based amorphous microwires for sensor applications. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 984-989.	0.8	21
17	Influence of microstructure evolution on GMI properties and magnetic domains of melt-extracted Zr-doped amorphous wires with accumulated DC annealing. Journal of Alloys and Compounds, 2015, 644, 180-185.	2.8	21
18	Table-like magnetocaloric behavior and enhanced cooling efficiency of a Bi-constituent Gd alloy wire-based composite. Journal of Alloys and Compounds, 2018, 764, 789-793.	2.8	20

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19	Microstructural evolution during extrusion and ECAP of a spray-deposited Alâ€“Znâ€“Mgâ€“Cuâ€“Scâ€“Zr alloy. Journal of Materials Science, 2010, 45, 3023-3029.	1.7	19
20	Experimental study on the effect of alternatingâ€current amplitude on GMI output stability of Coâ€based amorphous wires. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 910-914.	0.8	19
21	Correlation of magnetic domains, microstructure and GMI effect of Joule-annealed melt-extracted Co_{68.15} Fe_{4.35} Si_{12.25} B_{13.75} Nb₁ Cu_{0.5} microwires for double functional sensors. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 2515-2520.	0.8	19
22	Enhanced tensile properties and wear resistance of additively manufactured CoCrFeMnNi high-entropy alloy at cryogenic temperature. Rare Metals, 2022, 41, 1210-1216.	3.6	19
23	Critical magnetic and magnetocaloric behavior of amorphous melt-extracted Gd50(Co69.25Fe4.25Si13B13.5)50 microwires. Intermetallics, 2019, 110, 106479.	1.8	17
24	Deformation Behavior of Semisolid A356 Alloy Prepared by Low Temperature Pouring. Materials and Manufacturing Processes, 2010, 25, 648-653.	2.7	16
25	Two-peak feature of the permittivity spectra of ferromagnetic microwire/rubber composites. Applied Physics Letters, 2013, 102, .	1.5	16
26	Magnetocaloric effect in Niâ€“Mnâ€“Inâ€“Co microwires prepared by Taylor-Ulitovsky method. Transactions of Nonferrous Metals Society of China, 2014, 24, 3152-3157.	1.7	16
27	Impact of structural disorder on the magnetic ordering and magnetocaloric response of amorphous Gd-based microwires. Journal of Applied Physics, 2014, 115, .	1.1	14
28	Comparable magnetocaloric properties of melt-extracted Gd36Tb20Co20Al24 metallic glass microwires. Journal of Alloys and Compounds, 2020, 815, 150983.	2.8	14
29	Formation, thermal stability and mechanical properties of Ti42.5Zr7.5Cu40Ni5Sn5 bulk metallic glass. Science in China Series G: Physics, Mechanics and Astronomy, 2008, 51, 372-378.	0.2	13
30	Enhanced Curie temperature and cooling efficiency in melt-extracted Gd50(Co69.25Fe4.25Si13B13.5)50 microwires. Journal of Alloys and Compounds, 2017, 708, 678-684.	2.8	13
31	Three-dimensional reconstruction of bifilm defects. Scripta Materialia, 2021, 191, 179-184.	2.6	13
32	Structural evolution of a CuZr-based bulk metallic glass composite during cryogenic treatment observed by in-situ high-energy X-ray diffraction. Journal of Alloys and Compounds, 2021, 871, 159570.	2.8	13
33	Experimental study on the effect of wire bonding by Cu electroplating on GMI stability of Coâ€based amorphous wires. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 530-534.	0.8	12
34	Tridimensional morphology and kinetics of etch pit on the {0001} plane of sapphire crystal. Journal of Solid State Chemistry, 2012, 192, 60-67.	1.4	12
35	Effect of Double Oxide Film Defects on Mechanical Properties of As-Cast C95800 Alloy. Acta Metallurgica Sinica (English Letters), 2017, 30, 541-549.	1.5	12
36	New DyHoCo medium entropy amorphous microwires of large magnetic entropy change. Journal of Alloys and Compounds, 2020, 837, 155431.	2.8	12

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37	Investigation of deformation behavior of Zr-Ti-Ni-Cu-Be bulk metallic glass containing nanocrystals. Journal of Materials Science, 2005, 40, 4561-4569.	1.7	11
38	Cooling rate dependent as-cast microstructure and mechanical properties of Zr-based metallic glasses. Journal of Materials Science, 2007, 42, 4233-4239.	1.7	10
39	Microwave absorption properties of FeSiBNbCu glass-covered amorphous wires. Transactions of Nonferrous Metals Society of China, 2014, 24, 2574-2580.	1.7	10
40	Understanding the structure-Poissonâ€™s ratio relation in bulk metallic glass. Journal of Materials Science, 2018, 53, 7891-7899.	1.7	10
41	Temperature-dependent deformation behavior of a CuZr-based bulk metallic glass composite. Journal of Alloys and Compounds, 2021, 858, 158368.	2.8	10
42	Twin-Detector Sensor of Co-Rich Amorphous Microwires to Overcome GMI Fluctuation Induced by Ambient Temperature. IEEE Transactions on Magnetics, 2012, 48, 2449-2454.	1.2	9
43	Tailoring circular magnetic domain structure and high frequency magneto-impedance of melt-extracted Co69.25Fe4.25Si13B13.5 microwires through Nb doping. AIP Advances, 2017, 7, .	0.6	9
44	Cryogenic-temperature-induced phase transformation in a CuZr-based bulk metallic glass composite under tensile stress. Materials Letters, 2020, 262, 127065.	1.3	9
45	Microstructure and mechanical properties of twin-wire arc sprayed Ni-Al composite coatings on 6061-T6 aluminum alloy sheet. International Journal of Minerals, Metallurgy and Materials, 2014, 21, 469-478.	2.4	8
46	The disparate impact of two types of GMI effect definition on DC Joule-heating annealed Co-based microwires. RSC Advances, 2015, 5, 103609-103616.	1.7	8
47	High temperature deformation behavior and processing map of hot isostatically pressed Ti-47. 5Al-2Cr-2Nb-0. 2W-0. 2B alloy using gas atomization powders. Journal of Iron and Steel Research International, 2017, 24, 435-441.	1.4	8
48	The Magnetocaloric Composite Designed by Multiâ€Gdâ€Alâ€Co Microwires with Close Performances. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900090.	0.8	8
49	Oxide bifilm defects in aluminum alloy castings. Materials Letters, 2021, 285, 129089.	1.3	8
50	Cavity etching evolution on the A-plane of sapphire crystal in molten KOH etchant. Journal of Crystal Growth, 2020, 552, 125926.	0.7	7
51	Tensile deformation of a Mgâ€“2.54Ndâ€“0.26Znâ€“0.32Zr alloy at elevated temperature. Journal of Materials Science, 2009, 44, 4264-4269.	1.7	6
52	Microstructure of Niâ€“Al powder and Niâ€“Al composite coatings prepared by twin-wire arc spraying. International Journal of Minerals, Metallurgy and Materials, 2016, 23, 810-818.	2.4	6
53	Liquid-solid joining of bulk metallic glasses. Scientific Reports, 2016, 6, 30674.	1.6	6
54	Haze in sapphire crystals grown by SAPMAC method. Crystal Research and Technology, 2011, 46, 669-675.	0.6	5

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55	Tensile properties and fracture reliability of a glass-coated Co-based amorphous microwire. International Journal of Minerals, Metallurgy and Materials, 2014, 21, 583-588.	2.4	5
56	Tensile Properties and Fracture Reliability of Melt-extracted Gd-rich Amorphous Wires. Materials Research, 2015, 18, 66-71.	0.6	5
57	Tensile deformation mechanism of a bulk metallic glass matrix composite using in situ neutron diffraction. Journal of Non-Crystalline Solids, 2020, 546, 120267.	1.5	5
58	Aging behavior and precipitate characterization of Zn-rich Alâ€“Znâ€“Mgâ€“Cu alloys with various Mg and Cu contents. Journal of Iron and Steel Research International, 2021, 28, 1064-1073.	1.4	5
59	Determining deformation behaviors in a CuZr-based bulk metallic glass composite. Journal of Non-Crystalline Solids, 2021, 561, 120768.	1.5	5
60	Giant magneto-impedance effect of two paralleled amorphous microwires. Rare Metals, 2016, 35, 344-348.	3.6	4
61	Crystallization of a Ti-based Bulk Metallic Glass Induced by Electropulsing Treatment. Journal of Iron and Steel Research International, 2016, 23, 69-73.	1.4	4
62	Microstructure and elevated-temperature tensile properties of differential pressure sand cast Mg-4Y-3Nd-0.5Zr alloy. China Foundry, 2016, 13, 30-35.	0.5	4
63	Etching Behaviors of Sapphire's C- Plane Cavity. Surface Science, 2021, 707, 121805.	0.8	4
64	Frequency dependence of magnetization and giant magneto impedance effect of amorphous wires. International Journal of Minerals, Metallurgy and Materials, 2013, 20, 375-378.	2.4	3
65	Impacts of zinc layer and pouring method on interface performance for Al-22Si/ZL104 bi-metal. China Foundry, 2017, 14, 39-45.	0.5	3
66	Formation Mechanism of Surface Crack in Low Pressure Casting of A360 Alloy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 2826-2835.	1.0	3
67	Enhancement of Giant Magneto-Impedance in Series Co-Rich Microwires for Low-Field Sensing Applications. Journal of Electronic Materials, 2018, 47, 2667-2672.	1.0	3
68	Manufacture and characterization of HoErCo medium-entropy alloy microwires with excellent magnetic entropy change. Journal of Non-Crystalline Solids, 2021, 556, 120570.	1.5	3
69	Dislocation Etching Morphology on the A Plane of Sapphire Crystal. Crystal Research and Technology, 2021, 56, 2100022.	0.6	3
70	Flexible Bamboo-Structured NiCoMnIn Microfibers with Magnetic-Field-Induced Reverse Martensite Transformation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 3581-3584.	1.1	2
71	Influence of Wire-Connecting With Ni Electro-Plating on GMI Output Stability of Co-Rich Amorphous Microwires. IEEE Transactions on Magnetics, 2013, 49, 5639-5644.	1.2	2
72	Microstructure Evolution and Mechanical Properties of Spray-Deposited Alâ€“21. 47Si-4. 73Fe-2. 5Cu-0. 9Mg Alloy. Journal of Iron and Steel Research International, 2016, 23, 14-18.	1.4	2

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73	Condition Monitoring and Failure Prediction of Gear Rotation Using a Contactless RF Magnetic Sensor. Journal of Electronic Materials, 2019, 48, 4000-4006.	1.0	2
74	Magnetocaloric effect and microstructure of amorphous/nanocrystalline HoErFe melt-extracted microwires. Intermetallics, 2020, 127, 106974.	1.8	2
75	Intermediate-Temperature Tensile Behavior of a Hot-Rolled Mg-Li-Al-Cd-Zn Alloy. Materials, 2022, 15, 1686.	1.3	2
76	Tensile Properties of Melt-Extracted and Annealed Ni/Fe-Based Amorphous Metallic Fibers. Metals, 2022, 12, 918.	1.0	2
77	Tensile behaviours of equal channel angular pressed Alâ€“11Â·5Znâ€“2Mgâ€“1Â·5Cuâ€“0Â·2Scâ€“0Â·15Zr alloy fabricated by spray forming at ambient and elevated temperatures. Materials Science and Technology, 2013, 29, 234-239.	0.8	1
78	Effect of Al22Si/ZL102 bimetal interface fabricated by extrusion at near-eutectic temperature. Journal of Iron and Steel Research International, 2017, 24, 469-474.	1.4	1
79	High damping capacity of Niâ€“Mnâ€“Gaâ€“Cu microwires prepared by melt-extraction technique. Rare Metals, 2017, , 1.	3.6	1
80	Mechanical property statistical analysis of Gd50Al30Co20 amorphous wires for providing reference to design requirements of cooling system. Journal of Iron and Steel Research International, 2018, 25, 261-267.	1.4	1
81	Hot compression deformation of an Mgâ€“2.54Ndâ€“0.26Znâ€“0.32Zr alloy. International Journal of Materials Research, 2013, 104, 980-986.	0.1	0
82	Dataset on comparable magnetocaloric properties of melt-extracted Gd36Tb20Co20Al24 metallic glass microwires. Data in Brief, 2020, 28, 104960.	0.5	0
83	Hot deformation behavior of A390 alloy produced by semiâ€continuous cast. Material Design and Processing Communications, 2020, 2, e148.	0.5	0
84	Preliminary study on deformation behaviors of spray droplet impacting on nonrigid deposited layer. Material Design and Processing Communications, 2021, 3, e263.	0.5	0
85	Ion irradiation effect on mechanical properties and corrosion resistance of a Cu ₅₀ Zr ₅₀ metallic glass. Advanced Engineering Materials, 0, , .	1.6	0