Zhu Xiao

List of Publications by Citations

88 papers	1,467 citations	23 h-index	35 g-index
90 ext. papers	2,020 ext. citations	4.6 avg, IF	4.86 L-index

#	Paper	IF	Citations
88	Phase transformation behaviors and properties of a high strength Cu-Ni-Si alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 697, 37-47	5.3	92
87	A new ultrahigh strength Cu–Ni–Si alloy. *Intermetallics*, **2013**, 42, 77-84	3.5	84
86	Effects of Zr and (Ni, Si) additions on properties and microstructure of Cu–Cr alloy. *Journal of Alloys and Compounds*, **2014**, 582, 786-792	5.7	80
85	The evolution of microstructure in Cu–8.0Ni–1.8Si–0.15Mg alloy during aging. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 527, 6728-6733	5.3	56
84	Microstructure and properties of Cu-Cr-Nb alloy with high strength, high electrical conductivity and good softening resistance performance at elevated temperature. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 749, 281-290	5.3	53
83	Microstructure and Properties of a Novel Cu–Ni–Co–Si–Mg Alloy with Super-high Strength and Conductivity. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 744, 754-763	5.3	52
82	Phase transformations behavior in a Cu–8.0Ni–1.8Si alloy. *Journal of Alloys and Compounds*, **2011**, 509, 3617-3622	5.7	50
81	Microstructure and properties of high-conductivity, super-high-strength Cu–8.0Ni–1.8Si–0.6Sn–0.15Mg alloy. *Journal of Materials Research*, **2009**, 24, 2123-2129	2.5	50
80	Effect of magnesium on microstructure and properties of Cu-Cr alloy. *Journal of Alloys and Compounds*, **2018**, 752, 191-197	5.7	46
79	Microstructure and properties of a Cu–Ni–Si–Co–Cr alloy with high strength and high conductivity. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2019**, 759, 396-403	5.3	42
78	Microstructure and tensile properties of large-size 7055 aluminum billets fabricated by spray forming rapid solidification technology. *Journal of Alloys and Compounds*, **2013**, 578, 208-214	5.7	42
77	Precipitation behavior of Cu-3.0Ni-0.72Si alloy. *Acta Materialia*, **2019**, 166, 261-270	8.4	40
76	Dynamics of phase transformation of Cu-Ni-Si alloy with super-high strength and high conductivity during aging. *Transactions of Nonferrous Metals Society of China*, **2010**, 20, 1006-1011	3.3	39
75	High strength and large ductility in spray-deposited Al–Zn–Mg–Cu alloys. *Journal of Alloys and Compounds*, **2014**, 601, 120-125	5.7	38
74	Effect of processing of mechanical alloying and powder metallurgy on microstructure and properties of Cu–Al–Ni–Mn alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 488, 266-272	5.3	38
73	Effect of thermo-mechanical treatments on corrosion behavior of Cu-15Ni-8Sn alloy in 3.5 wt% NaCl solution. *Materials Chemistry and Physics*, **2017**, 199, 54-66	4.4	37
72	Microstructure evolution and properties of Cu-Cr alloy during continuous extrusion process. *Journal of Alloys and Compounds*, **2017**, 703, 454-460	5.7	34

71	Surface characterization and corrosion behavior of a novel gold-imitation copper alloy with high tarnish resistance in salt spray environment. *Corrosion Science*, **2013**, 76, 42-51	6.8	32
70	Microstructure and properties of a novel Cu-Mg-Ca alloy with high strength and high electrical conductivity. *Journal of Alloys and Compounds*, **2017**, 723, 1162-1170	5.7	31
69	Temperature-independent piezoresistive sensors based on carbon nanotube/polymer nanocomposite. *Carbon*, **2018**, 137, 188-195	10.4	31
68	Microstructural evolution, phase transition, and physics properties of a high strength Cu□Ni□Si□Al alloy. *Materials Characterization*, **2019**, 147, 315-323	3.9	29
67	Effects of silicon and thermo-mechanical process on microstructure and properties of Cu□10Ni□Al□.8Si alloy. *Materials & Design*, **2014**, 62, 265-270		25
66	Heat transfer coefficient of porous copper with homogeneous and hybrid structures in active cooling. *Journal of Materials Research*, **2013**, 28, 2545-2553	2.5	24
65	Effect of temperature on the electrical property of epoxy composites with carbon nanotube. *Composites Science and Technology*, **2017**, 149, 48-54	8.6	23
64	Effects of minor rare earths on the microstructure and properties of Cu-Cr-Zr alloy. *Journal of Alloys and Compounds*, **2020**, 847, 155762	5.7	22
63	Microstructure and properties of Cu-10 wt%Fe alloy produced by double melt mixed casting and multi-stage thermomechanical treatment. *Journal of Alloys and Compounds*, **2020**, 820, 153323	5.7	21
62	A percolation network model to predict the electrical property of flexible CNT/PDMS composite films fabricated by spin coating technique. *Composites Part B: Engineering*, **2019**, 174, 107034	10	18
61	Structure and properties of ductile CuAlMn shape memory alloy synthesized by mechanical alloying and powder metallurgy. *Materials & Design*, **2014**, 58, 451-456		18
60	Microstructure evolution and quench sensitivity of Cu□10Ni□Al□.8Si alloy during isothermal treatment. *Journal of Materials Research*, **2015**, 30, 736-744	2.5	15
59	High temperature mechanical behavior of alumina dispersion strengthened copper alloy with high content of alumina. *Transactions of Nonferrous Metals Society of China*, **2015**, 25, 444-450	3.3	15
58	Microstructure and properties of Cu□Mg-Ca alloy processed by equal channel angular pressing. *Journal of Alloys and Compounds*, **2019**, 788, 50-60	5.7	14
57	High temperature response capability in carbon nanotube/polymer nanocomposites. *Composites Science and Technology*, **2018**, 167, 563-570	8.6	13
56	Microstructure and property of the composite laminate cladded by explosive welding of CuAlMn shape memory alloy and QBe2 alloy. *Materials & Design*, **2009**, 30, 1404-1408		12
55	Microstructure and texture evolution of novel Cu□10Ni□Al□.8Si alloy during hot deformation. *Journal of Materials Research*, **2016**, 31, 1113-1123	2.5	12
54	Dry wear behavior of ultra-high strength Cu□10Ni□Al□.8Si alloy. *Tribology International*, **2015**, 92, 544-552	4.9	11

53	Adiabatic shear deformation behaviors of cold-rolled copper under different impact loading directions. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 754, 330-338	5.3	10
52	Microstructure evolution of Cu□.2Mg alloy during continuous extrusion process. *Journal of Materials Research*, **2015**, 30, 2783-2791	2.5	10
51	Structure evolution of Cu-based shape memory powder during mechanical alloying. *Transactions of Nonferrous Metals Society of China*, **2007**, 17, 1422-1427	3.3	10
50	Development of homogeneity in a Cu-Mg-Ca alloy processed by equal channel angular pressing. *Journal of Alloys and Compounds*, **2020**, 820, 153112	5.7	10
49	Effects of thermal treatments on the residual stress and micro-yield strength of Al2O3 dispersion strengthened copper alloy. *Journal of Alloys and Compounds*, **2019**, 781, 490-495	5.7	10
48	Effects of grain size on the microstructure and texture of cold-rolled Ta-2.5W alloy. *International Journal of Refractory Metals and Hard Materials*, **2016**, 58, 125-136	4.1	9
47	Microstructure and Properties of a Cu-Ni-Sn Alloy Treated by Two-Stage Thermomechanical Processing. *Jom*, **2019**, 71, 2734-2741	2.1	9
46	Characterization of Dispersion Strengthened Copper Alloy Prepared by Internal Oxidation Combined with Mechanical Alloying. *Journal of Materials Engineering and Performance*, **2017**, 26, 5641-5647	1.6	9
45	Surface modification with SiO2 coating on biomedical TiNi shape memory alloy by sol□gel method. *Transactions of Nonferrous Metals Society of China*, **2015**, 25, 3723-3728	3.3	9
44	Microstructure and properties of a novel Cu-Cr-Yb alloy with high strength, high electrical conductivity and good softening resistance. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 795, 140001	5.3	9
43	Microstructure evolution and deformation behaviour of Cu-10□wt%Fe alloy during cold rolling. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2021**, 801, 140379	5.3	9
42	Effect of Aging Time on the Corrosion Behavior of a Cu-Ni-Si Alloy in 3.5 wt% NaCl Solution. *Corrosion*, **2016**, 72, 615-627	1.8	8
41	Precipitation Behavior and Quenching Sensitivity of a Spray Deposited Al-Zn-Mg-Cu-Zr Alloy. *Materials*, **2017**, 10,	3.5	8
40	Tuning the interfacial spin-orbit coupling with ferroelectricity. *Nature Communications*, **2020**, 11, 2627	17.4	8
39	Quench Sensitivity of AA7N01 Alloy Used for High-Speed Train Body Structure. *Jom*, **2019**, 71, 1681-1686	2.1	7
38	Hot Deformation Behavior of a Spray-Deposited Al-8.31Zn-2.07Mg-2.46Cu-0.12Zr Alloy. *Metals*, **2017**, 7, 299	2.3	6
37	Hot deformation behavior of a CuAlMn shape memory alloy. *Journal of Alloys and Compounds*, **2020**, 845, 156161	5.7	6
36	Electrical characterization of flexible CNT/polydimethylsiloxane composite films with finite thickness. *Carbon*, **2019**, 154, 439-447	10.4	5

35	Effect of accumulative roll-bonding process on phase transformation and magnetic properties of polycrystalline cobalt. *Materials Characterization*, **2020**, 163, 110290	3.9	5
34	Effect of Equal Channel Angular Pressing on Microstructure and Mechanical Properties of a Cu-Mg Alloy. *Crystals*, **2020**, 10, 426	2.3	5
33	Investigations on Voids Formation in Cu–Mg Alloy During Continuous Extrusion. *Jom*, **2017**, 69, 1696-1700	2.1	5
32	Corrosion behavior of Cu–Al–Mn–Zn–Zr shape memory alloy in NaCl solution. *Transactions of Nonferrous Metals Society of China*, **2021**, 31, 1012-1022	3.3	5
31	A Novel Cu-10Zn-1.5Ni-0.34Si Alloy with Excellent Mechanical Property Through Precipitation Hardening. *Journal of Materials Engineering and Performance*, **2016**, 25, 4624-4630	1.6	5
30	The evolution of microstructure and properties of a Cu–Ti–Cr–Mg–Si alloy with high strength during the multi-stage thermomechanical treatment. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 803, 140510	5.3	5
29	Atom exchange of martensite in Cu-13Zn-15Al alloy during non-isothermal aging. *Transactions of Nonferrous Metals Society of China*, **2006**, 16, 1064-1068	3.3	4
28	Microstructural evolution and properties of Cu–20 wt% Ag alloy wire by multi-pass continuous drawing. *Nanotechnology Reviews*, **2020**, 9, 1359-1367	6.3	4
27	Effects of microelements on the microstructure evolution and properties of ultrahigh strength Cu–Ti alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 823, 141581	5.3	4
26	Microstructure and properties of high strength, high conductivity and magnetic Cu–10Fe-0.4Si alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 826, 142012	5.3	4
25	Sphericizing tungsten particles by means of localized preferential oxidation and alkaline washing. *Powder Technology*, **2012**, 228, 187-192	5.2	3
24	Fabrication of a Cu/TiNi Composite with High Air-Tightness and Low Thermal Expansion. *Jom*, **2020**, 72, 883-888	2.1	3
23	Microstructure and properties of Cu-Ag alloy prepared by continuously directional solidification. *Journal of Alloys and Compounds*, **2021**, 883, 160769	5.7	3
22	Mechanical property and corrosion behavior of aged Cu-20Ni-20Mn alloy with ultra-high strength. *Journal of Central South University*, **2020**, 27, 1158-1167	2.1	2
21	Microstructure, and Physical and Mechanical Properties of Copper–Graphite Composites Obtained by In Situ Reaction Method. *Journal of Materials Engineering and Performance*, **2020**, 29, 1696-1705	1.6	2
20	Microstructure evolution and hot deformation behavior of Cu–3Ti–0.1Zr alloy with ultra-high strength. *Transactions of Nonferrous Metals Society of China*, **2020**, 30, 2737-2748	3.3	2
19	Effect of creep annealing on the dimensional stability of dispersion strengthened copper alloy. *Journal of Alloys and Compounds*, **2021**, 887, 161321	5.7	2
18	Cu/SiCP Composites Prepared by In-Situ Carbonization Synthesis. *Jom*, **2019**, 71, 2513-2521	2.1	1

17	Microstructure evolution of alumina dispersion strengthened copper alloy deformed under different conditions. *Transactions of Nonferrous Metals Society of China*, **2015**, 25, 3953-3958	3.3	1
16	Porous CuAlMn Shape-Memory Alloys with Controlling Porosity and Pores□Structural Parameter Produced by Sintering-Evaporation Process. *Advanced Materials Research*, **2010**, 123-125, 1011-1014	0.5	1
15	Effect of trace silicon addition on microstructure and properties of a Cu□.26Cr□.14Mg alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2022**, 833, 142511	5.3	1
14	Effects of Fe content on microstructure and properties of Cu□e alloy. *Transactions of Nonferrous Metals Society of China*, **2021**, 31, 3039-3049	3.3	1
13	Effects of trace calcium and strontium on microstructure and properties of Cu-Cr alloys. *Journal of Materials Science and Technology*, **2021**,	9.1	1
12	A multiphase strengthened Cu-Nb-Si alloy with high strength and high conductivity. *Materials Characterization*, **2021**, 182, 111565	3.9	1
11	Microstructure Evolution and Hot Deformation Behavior of a CuNiSn Alloy. *Processes*, **2021**, 9, 451	2.9	1
10	Dynamic Recrystallization of Cu-Cr-Ni-Si-Co Alloy During Hot Deformation. *Jom*, **2021**, 73, 2274-2284	2.1	1
9	Effect of Al on Corrosion Behavior of Imitation-Gold Cu-Zn-Ni-Sn Alloys in 3.5 wt.% NaCl solution. *Jom*, **2021**, 73, 589-599	2.1	1
8	Recrystallization behavior and phase transformation in a hot-rolled pure cobalt during annealing at the elevated temperature. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2022**, 845, 143178	5.3	1
7	Uncovering Microstructure Evolution and Dynamic Softening Mechanism of Spray-Deposited AlZnMgCu Alloy Under Thermal Deformation. *Metals and Materials International*,1	2.4	0
6	Microstructure and properties of Cu-TiNi composites prepared by vacuum hot pressing. *Journal of Alloys and Compounds*, **2021**, 162729	5.7	0
5	Effect of equal channel angular pressing on microstructure evolution and properties variations of a CuCrZrY alloy. *Journal of Alloys and Compounds*, **2022**, 894, 162284	5.7	0
4	Interface Microstructure and Tribological Behaviors of Copper Matrix Composites with High Graphite Content Prepared by Short-Process Reduction and Vacuum Hot Pressing. *Jom*, **2022**, 74, 2094	2.1	0
3	Cr-based second phases in a high conductivity Cu-Cr-Nb alloy with high high-temperature strength. *Materials and Design*, **2022**, 219, 110784	8.1	0
2	Effects of enhanced nucleation on the growth and thermal performance of diamond films deposited on BeO by hot filament CVD technique. *Frontiers of Materials Science in China*, **2008**, 2, 369-374		
1	Effects of thermal-mechanical treatment on microstructure and properties of Cu-Zn-Fe alloy. *IOP Conference Series: Earth and Environmental Science*, **2018**, 199, 032011	0.3	