Zhu Xiao

List of Publications by Year in descending order

89 papers	2,606 citations	172386 29 h-index	223716 46 g-index
90 all docs	90 docs citations	90 times ranked	916 citing authors

#	Article	IF	Citations
1	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.	2.6	147
2	A new ultrahigh strength Cuâ€“Niâ€“Si alloy. Intermetallics, 2013, 42, 77-84.	1.8	117
3	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.	2.6	116
4	Effects of Zr and (Ni, Si) additions on properties and microstructure of Cuâ€“Cr alloy. Journal of Alloys and Compounds, 2014, 582, 786-792.	2.8	110
5	Microstructure and Properties of a Novel Cuâ€“Niâ€“Coâ€“Siâ€“Mg Alloy with Super-high Strength and Conductivity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 744, 754-763.	2.6	97
6	Microstructure and properties of a Cuâ€“Niâ€“Siâ€“Coâ€“Cr alloy with high strength and high conductivity. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 759, 396-403.	2.6	85
7	Effect of magnesium on microstructure and properties of Cu-Cr alloy. Journal of Alloys and Compounds, 2018, 752, 191-197.	2.8	80
8	Precipitation behavior of Cu-3.0Ni-0.72Si alloy. Acta Materialia, 2019, 166, 261-270.	3.8	78
9	The evolution of microstructure in Cuâ€“8.0Niâ€“1.8Siâ€“0.15Mg alloy during aging. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 6728-6733.	2.6	72
10	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.	2.8	70
11	Effects of minor rare earths on the microstructure and properties of Cu-Cr-Zr alloy. Journal of Alloys and Compounds, 2020, 847, 155762.	2.8	63
12	Microstructure and properties of high-conductivity, super-high-strength Cuâ€“8.0Niâ€“1.8Siâ€“0.6Snâ€“0.15Mg alloy. Journal of Materials Research, 2009, 24, 2123-2129.	1.2	59
13	Effect of thermo-mechanical treatments on corrosion behavior of Cu-15Ni-8Sn alloy in 3.5Âwt% NaCl solution. Materials Chemistry and Physics, 2017, 199, 54-66.	2.0	56
14	Microstructure and properties of Cu-10Âwt%Fe alloy produced by double melt mixed casting and multi-stage thermomechanical treatment. Journal of Alloys and Compounds, 2020, 820, 153323.	2.8	56
15	Phase transformations behavior in a Cuâ€“8.0Niâ€“1.8Si alloy. Journal of Alloys and Compounds, 2011, 509, 3617-3622.	2.8	54
16	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.	2.8	51
17	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.	1.7	50
18	Microstructural evolution, phase transition, and physics properties of a high strength Cuâ€“Niâ€“Siâ€“Al alloy. Materials Characterization, 2019, 147, 315-323.	1.9	50

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19	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.	3.0	49
20	Temperature-independent piezoresistive sensors based on carbon nanotube/polymer nanocomposite. Carbon, 2018, 137, 188-195.	5.4	49
21	Microstructure evolution and deformation behaviour of Cu-10Âwt%Fe alloy during cold rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 801, 140379.	2.6	49
22	Microstructure evolution and properties of Cu-Cr alloy during continuous extrusion process. Journal of Alloys and Compounds, 2017, 703, 454-460.	2.8	47
23	High strength and large ductility in spray-deposited Alâ€“Znâ€“Mgâ€“Cu alloys. Journal of Alloys and Compounds, 2014, 601, 120-125.	2.8	44
24	Effect of processing of mechanical alloying and powder metallurgy on microstructure and properties of Cuâ€“Alâ€“Niâ€“Mn alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 488, 266-272.	2.6	42
25	Effects of silicon and thermo-mechanical process on microstructure and properties of Cuâ€“10Niâ€“3Alâ€“0.8Si alloy. Materials & Design, 2014, 62, 265-270.	5.1	36
26	Heat transfer coefficient of porous copper with homogeneous and hybrid structures in active cooling. Journal of Materials Research, 2013, 28, 2545-2553.	1.2	34
27	Microstructure and properties of high strength, high conductivity and magnetic Cuâ€“10Fe-0.4Si alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 826, 142012.	2.6	34
28	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.	2.6	33
29	The evolution of microstructure and properties of a Cuâ€“Tiâ€“Crâ€“Mgâ€“Si alloy with high strength during the multi-stage thermomechanical treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 803, 140510.	2.6	33
30	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.	5.9	30
31	Effect of temperature on the electrical property of epoxy composites with carbon nanotube. Composites Science and Technology, 2017, 149, 48-54.	3.8	29
32	Effects of microelements on the microstructure evolution and properties of ultrahigh strength Cuâ€“Ti alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 823, 141581.	2.6	29
33	Effects of trace calcium and strontium on microstructure and properties of Cu-Cr alloys. Journal of Materials Science and Technology, 2022, 112, 11-23.	5.6	29
34	Microstructure and properties of Cuâ€“Mg-Ca alloy processed by equal channel angular pressing. Journal of Alloys and Compounds, 2019, 788, 50-60.	2.8	28
35	Effects of Fe content on microstructure and properties of Cuâ€“Fe alloy. Transactions of Nonferrous Metals Society of China, 2021, 31, 3039-3049.	1.7	25
36	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.	1.7	22

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37	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.	2.8	22
38	Microstructure and Properties of a Cu-Ni-Sn Alloy Treated by Two-Stage Thermomechanical Processing. Jom, 2019, 71, 2734-2741.	0.9	21
39	Structure and properties of ductile CuAlMn shape memory alloy synthesized by mechanical alloying and powder metallurgy. Materials & Design, 2014, 58, 451-456.	5.1	20
40	Microstructure evolution and quench sensitivity of Cuâ€“10Niâ€“3Alâ€“0.8Si alloy during isothermal treatment. Journal of Materials Research, 2015, 30, 736-744.	1.2	20
41	Effect of trace silicon addition on microstructure and properties of a Cuâ€“0.26Crâ€“0.14Mg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 833, 142511.	2.6	20
42	Development of homogeneity in a Cu-Mg-Ca alloy processed by equal channel angular pressing. Journal of Alloys and Compounds, 2020, 820, 153112.	2.8	19
43	Tuning the interfacial spin-orbit coupling with ferroelectricity. Nature Communications, 2020, 11, 2627.	5.8	19
44	High temperature response capability in carbon nanotube/polymer nanocomposites. Composites Science and Technology, 2018, 167, 563-570.	3.8	18
45	Corrosion behavior of Cuâˆ’Alâˆ’Mnâˆ’Znâˆ’Zr shape memory alloy in NaCl solution. Transactions of Nonferrous Metals Society of China, 2021, 31, 1012-1022.	1.7	18
46	Microstructure and properties of Cu-Ag alloy prepared by continuously directional solidification. Journal of Alloys and Compounds, 2021, 883, 160769.	2.8	18
47	Microstructure evolution of Cuâ€“0.2Mg alloy during continuous extrusion process. Journal of Materials Research, 2015, 30, 2783-2791.	1.2	17
48	Microstructural evolution and properties of Cuâ€“20 wt% Ag alloy wire by multi-pass continuous drawing. Nanotechnology Reviews, 2020, 9, 1359-1367.	2.6	16
49	Microstructure and texture evolution of novel Cuâ€“10Niâ€“3Alâ€“0.8Si alloy during hot deformation. Journal of Materials Research, 2016, 31, 1113-1123.	1.2	15
50	Microstructure and properties of Cuâ€“Niâ€“Coâ€“Siâ€“Crâ€“Mg alloys with different Si contents after multi-step thermo-mechanical treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 850, 143532.	2.6	15
51	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.	5.1	14
52	Dry wear behavior of ultra-high strength Cuâ€“10Niâ€“3Alâ€“0.8Si alloy. Tribology International, 2015, 92, 544-552.	3.0	14
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.	2.6	14
54	A multiphase strengthened Cu-Nb-Si alloy with high strength and high conductivity. Materials Characterization, 2021, 182, 111565.	1.9	14

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55	Cr-based second phases in a high conductivity Cu-Cr-Nb alloy with high high-temperature strength. Materials and Design, 2022, 219, 110784.	3.3	14
56	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.	1.7	13
57	Microstructure evolution and hot deformation behavior of Cuâ^'3Tiâ^'0.1Zr alloy with ultra-high strength. Transactions of Nonferrous Metals Society of China, 2020, 30, 2737-2748.	1.7	13
58	CharacterizationÂofÂDispersionÂStrengthenedÂCopperÂAlloyÂPreparedÂbyÂInternalÂOxidation Combined with Mechanical Alloying. Journal of Materials Engineering and Performance, 2017, 26, 5641-5647.	1.2	12
59	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.	0.5	11
60	Precipitation Behavior and Quenching Sensitivity of a Spray Deposited Al-Zn-Mg-Cu-Zr Alloy. Materials, 2017, 10, 1100.	1.3	11
61	Hot deformation behavior of a CuAlMn shape memory alloy. Journal of Alloys and Compounds, 2020, 845, 156161.	2.8	11
62	Mechanical property and corrosion behavior of aged Cu-20Ni-20Mn alloy with ultra-high strength. Journal of Central South University, 2020, 27, 1158-1167.	1.2	11
63	Effect of Equal Channel Angular Pressing on Microstructure and Mechanical Properties of a Cu-Mg Alloy. Crystals, 2020, 10, 426.	1.0	11
64	Structure evolution of Cu-based shape memory powder during mechanical alloying. Transactions of Nonferrous Metals Society of China, 2007, 17, 1422-1427.	1.7	10
65	Surface modification with SiO2 coating on biomedical TiNi shape memory alloy by solâ€“gel method. Transactions of Nonferrous Metals Society of China, 2015, 25, 3723-3728.	1.7	10
66	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.	2.6	10
67	Electrical characterization of flexible CNT/polydimethylsiloxane composite films with finite thickness. Carbon, 2019, 154, 439-447.	5.4	9
68	Quench Sensitivity of AA7N01 Alloy Used for High-Speed Train Body Structure. Jom, 2019, 71, 1681-1686.	0.9	9
69	Microstructure and properties of Cu-TiNi composites prepared by vacuum hot pressing. Journal of Alloys and Compounds, 2022, 897, 162729.	2.8	9
70	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.	1.2	8
71	Investigations on Voids Formation in Cuâ€“Mg Alloy During Continuous Extrusion. Jom, 2017, 69, 1696-1700.	0.9	8
72	Hot Deformation Behavior of a Spray-Deposited Al-8.31Zn-2.07Mg-2.46Cu-0.12Zr Alloy. Metals, 2017, 7, 299.	1.0	8

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73	Effect of accumulative roll-bonding process on phase transformation and magnetic properties of polycrystalline cobalt. Materials Characterization, 2020, 163, 110290.	1.9	7
74	Effect of creep annealing on the dimensional stability of dispersion strengthened copper alloy. Journal of Alloys and Compounds, 2021, 887, 161321.	2.8	6
75	Sphericizing tungsten particles by means of localized preferential oxidation and alkaline washing. Powder Technology, 2012, 228, 187-192.	2.1	5
76	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, 2094-2105.	0.9	5
77	Atom exchange of martensite in Cu-13Zn-15Al alloy during non-isothermal aging. Transactions of Nonferrous Metals Society of China, 2006, 16, 1064-1068.	1.7	4
78	Fabrication of a Cu/TiNi Composite with High Air-Tightness and Low Thermal Expansion. Jom, 2020, 72, 883-888.	0.9	4
79	Microstructure, and Physical and Mechanical Properties of Copperâ€“Graphite Composites Obtained by In Situ Reaction Method. Journal of Materials Engineering and Performance, 2020, 29, 1696-1705.	1.2	3
80	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.	0.9	3
81	Effect of equal channel angular pressing on microstructure evolution and properties variations of a CuCrZrY alloy. Journal of Alloys and Compounds, 2022, 894, 162284.	2.8	3
82	Uncovering Microstructure Evolution and Dynamic Softening Mechanism of Spray-Deposited AlZnMgCu Alloy Under Thermal Deformation. Metals and Materials International, 2022, 28, 2103-2117.	1.8	3
83	Microstructure evolution of alumina dispersion strengthened copper alloy deformed under different conditions. Transactions of Nonferrous Metals Society of China, 2015, 25, 3953-3958.	1.7	2
84	Microstructure Evolution and Hot Deformation Behavior of a CuNiSn Alloy. Processes, 2021, 9, 451.	1.3	2
85	Dynamic Recrystallization of Cu-Cr-Ni-Si-Co Alloy During Hot Deformation. Jom, 2021, 73, 2274-2284.	0.9	2
86	Porous CuAlMn Shape-Memory Alloys with Controlling Porosity and Poresâ€™ Structural Parameter Produced by Sintering-Evaporation Process. Advanced Materials Research, 2010, 123-125, 1011-1014.	0.3	1
87	Cu/SiCP Composites Prepared by In-Situ Carbonization Synthesis. Jom, 2019, 71, 2513-2521.	0.9	1
88	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.	0.5	0
89	Effects of thermal-mechanical treatment on microstructure and properties of Cu-Zn-Fe alloy. IOP Conference Series: Earth and Environmental Science, 2018, 199, 032011.	0.2	0