Yuan Wu

List of Publications by Year in Descending Order

106 papers	6,613 citations	36 h-index	80 g-index
108 ext. papers	8,379 ext. citations	7.9 avg, IF	5.95 L-index

#	Paper	IF	Citations
106	Revealing the role of local shear strain partition of transformable particles in a TRIP-reinforced bulk metallic glass composite via digital image correlation. *International Journal of Minerals, Metallurgy and Materials*, **2022**, 29, 807-813	3.1	
105	Corrosion and irradiation behavior of Fe-based amorphous coating in lead-bismuth eutectic liquids. *Science China Technological Sciences*, **2022**, 65, 440-449	3.5	1
104	Local chemical fluctuation mediated ultra-sluggish martensitic transformation in high-entropy intermetallics.. *Materials Horizons*, **2021**,	14.4	1
103	Substantially enhanced plasticity of bulk metallic glasses by densifying local atomic packing. *Nature Communications*, **2021**, 12, 6582	17.4	5
102	Unravel unusual hardening behavior of a PdNiP metallic glass in its supercooled liquid region. *Applied Physics Letters*, **2021**, 118, 121902	3.4	0
101	Chemical short-range ordering and its strengthening effect in refractory high-entropy alloys. *Physical Review B*, **2021**, 103,	3.3	6
100	Alkali-deficiency driven charged out-of-phase boundaries for giant electromechanical response. *Nature Communications*, **2021**, 12, 2841	17.4	4
99	Strain hardening mediated by coherent nanoprecipitates in ultrahigh-strength steels. *Acta Materialia*, **2021**, 213, 116984	8.4	4
98	Improving high-temperature mechanical properties of cast CrFeCoNi high-entropy alloy by highly thermostable in-situ precipitated carbides. *Journal of Materials Science and Technology*, **2021**, 72, 29-38	9.1	5
97	Stacking Fault Driven Phase Transformation in CrCoNi Medium Entropy Alloy. *Nano Letters*, **2021**, 21, 1419-1426	11.5	18
96	Facile route to bulk ultrafine-grain steels for high strength and ductility. *Nature*, **2021**, 590, 262-267	50.4	22
95	Snoek-type damping performance in strong and ductile high-entropy alloys. *Science Advances*, **2020**, 6, eaba7802	14.3	23
94	Cooperative deformation in high-entropy alloys at ultralow temperatures. *Science Advances*, **2020**, 6, eaax4002	14.3	77
93	Prediction of Structural Type for City-Scale Seismic Damage Simulation Based on Machine Learning. *Applied Sciences (Switzerland)*, **2020**, 10, 1795	2.6	7
92	Compressive ductility and fracture resistance in CuZr-based shape-memory metallic-glass composites. *International Journal of Plasticity*, **2020**, 128, 102687	7.6	10
91	Tailoring grain growth and solid solution strengthening of single-phase CrCoNi medium-entropy alloys by solute selection. *Journal of Materials Science and Technology*, **2020**, 54, 196-205	9.1	18
90	Simultaneously enhancing the strength and plasticity of Ti-based bulk metallic glass composites via microalloying with Ta. *Materials Research Letters*, **2020**, 8, 23-30	7.4	10

89	Formation mechanism and characterization of immiscible nanoporous binary Cu□Ag alloys with excellent surface-enhanced Raman scattering performance by chemical dealloying of glassy precursors. *Inorganic Chemistry Frontiers*, **2020**, 7, 1127-1139	6.8	10
88	Enhanced crystallization resistance and thermal stability via suppressing the metastable superlattice phase in Ni-(Pd)-P metallic glasses. *Journal of Materials Science and Technology*, **2020**, 42, 203-211	9.1	2
87	Deformation-enhanced hierarchical multiscale structure heterogeneity in a Pd-Si bulk metallic glass. *Acta Materialia*, **2020**, 200, 42-55	8.4	14
86	Evaluation of pitting corrosion in duplex stainless steel Fe20Cr9Ni for nuclear power application. *Acta Materialia*, **2020**, 197, 172-183	8.4	29
85	Extremely high dislocation density and deformation pathway of CrMnFeCoNi high entropy alloy at ultralow temperature. *Scripta Materialia*, **2020**, 188, 21-25	5.6	27
84	Ordered nitrogen complexes overcoming strength□ductility trade-off in an additively manufactured high-entropy alloy. *Virtual and Physical Prototyping*, **2020**, 15, 532-542	10.1	11
83	Interpretable machine-learning strategy for soft-magnetic property and thermal stability in Fe-based metallic glasses. *Npj Computational Materials*, **2020**, 6,	10.9	19
82	Ultrasonic Assisted Sintering Using Heat Converted from Mechanical Energy. *Metals*, **2020**, 10, 971	2.3	3
81	Self-Assembled Hexagonal Lu1□InxFeO3 Nanopillars Embedded in Orthorhombic Lu1□InxFeO3 Nanoparticle Matrixes as Room-Temperature Multiferroic Thin Films for Memory Devices and Spintronic Applications. *ACS Applied Nano Materials*, **2020**, 3, 7516-7523	5.6	2
80	Enhanced Corrosion Resistance of an Alumina-forming Austenitic Steel Against Molten Al. *Oxidation of Metals*, **2020**, 94, 465-475	1.6	2
79	Unraveling magneto-structural coupling of Ni2MnGa alloy under the application of stress and magnetic field using in situ polarized neutron diffraction. *Applied Physics Letters*, **2020**, 117, 081905	3.4	2
78	Flexible Honeycombed Nanoporous/Glassy Hybrid for Efficient Electrocatalytic Hydrogen Generation. *Advanced Materials*, **2019**, 31, e1904989	24	44
77	Fe-based bulk metallic glasses: Glass formation, fabrication, properties and applications. *Progress in Materials Science*, **2019**, 103, 235-318	42.2	157
76	Formation, structure and properties of biocompatible TiZrHfNbTa high-entropy alloys. *Materials Research Letters*, **2019**, 7, 225-231	7.4	65
75	Ultrahigh cyclability of a large elastocaloric effect in multiferroic phase-transforming materials. *Materials Research Letters*, **2019**, 7, 137-144	7.4	24
74	Strengthening of a CrMnFeCoNi high-entropy alloy by carbide precipitation. *Journal of Alloys and Compounds*, **2019**, 792, 1028-1035	5.7	42
73	Transformation-reinforced high-entropy alloys with superior mechanical properties via tailoring stacking fault energy. *Journal of Alloys and Compounds*, **2019**, 792, 444-455	5.7	53
72	Work-hardenable Zr-based bulk metallic glass composites reinforced with ex-situ TiNi fibers. *Journal of Alloys and Compounds*, **2019**, 806, 1497-1508	5.7	5

71	Interface-driven unusual anomalous Hall effect in MnxGa/Pt bilayers. *Physical Review B*, **2019**, 100,	3.3	5
70	Enhancement of glass-forming ability and plasticity via alloying the elements having positive heat of mixing with Cu in Cu48Zr48Al4 bulk metallic glass. *Journal of Alloys and Compounds*, **2019**, 777, 382-391	5.7	19
69	Influences of Au ion radiation on microstructure and surface-enhanced Raman scattering of nanoporous copper. *Nanotechnology*, **2018**, 29, 184001	3.4	4
68	Microstructure and mechanical properties of FeCoNiCr high-entropy alloy strengthened by nano-Y2O3 dispersion. *Science China Technological Sciences*, **2018**, 61, 179-183	3.5	21
67	Stacking fault energy of face-centered-cubic high entropy alloys. *Intermetallics*, **2018**, 93, 269-273	3.5	174
66	Enhanced strength and ductility in a high-entropy alloy via ordered oxygen complexes. *Nature*, **2018**, 563, 546-550	50.4	516
65	Effects of non-hydrostaticity and grain size on the pressure-induced phase transition of the CoCrFeMnNi high-entropy alloy. *Journal of Applied Physics*, **2018**, 124, 115901	2.5	12
64	Improving plasticity of the Zr46Cu46Al8 bulk metallic glass via thermal rejuvenation. *Science Bulletin*, **2018**, 63, 840-844	10.6	40
63	Beneficial effects of oxygen addition on glass formation in a high-entropy bulk metallic glass. *Intermetallics*, **2018**, 99, 44-50	3.5	18
62	High-temperature plastic flow of a precipitation-hardened FeCoNiCr high entropy alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 686, 34-40	5.3	46
61	Phase-Transformation Ductilization of Brittle High-Entropy Alloys via Metastability Engineering. *Advanced Materials*, **2017**, 29, 1701678	24	280
60	Polymorphism in a high-entropy alloy. *Nature Communications*, **2017**, 8, 15687	17.4	151
59	Impacts of atomic scale lattice distortion on dislocation activity in high-entropy alloys. *Extreme Mechanics Letters*, **2017**, 17, 38-42	3.9	31
58	Transformation-induced plasticity in bulk metallic glass composites evidenced by in-situ neutron diffraction. *Acta Materialia*, **2017**, 124, 478-488	8.4	72
57	Micro-alloying Effects of Yttrium on Recrystallization Behavior of an Alumina-forming Austenitic Stainless Steel. *Journal of Iron and Steel Research International*, **2016**, 23, 553-558	1.2	17
56	Microstructural Control via Copious Nucleation Manipulated by In Situ Formed Nucleants: Large-Sized and Ductile Metallic Glass Composites. *Advanced Materials*, **2016**, 28, 8156-8161	24	46
55	Effects of Nitrogen on the Glass Formation and Mechanical Properties of a Ti-Based Metallic Glass. *Acta Metallurgica Sinica (English Letters)*, **2016**, 29, 173-180	2.5	11
54	Microstructure and mechanical properties of equimolar FeCoCrNi high entropy alloy prepared via powder extrusion. *Intermetallics*, **2016**, 75, 25-30	3.5	80

53	Formation mechanism and characterization of nanoporous silver with tunable porosity and promising capacitive performance by chemical dealloying of glassy precursor. *Acta Materialia*, **2016**, 105, 367-377	8.4	43
52	Bendable nanoporous copper thin films with tunable thickness and pore features. *Corrosion Science* , **2016**, 104, 227-235	6.8	26
51	A precipitation-hardened high-entropy alloy with outstanding tensile properties. *Acta Materialia*, **2016**, 102, 187-196	8.4	1020
50	Precipitation behavior and its effects on tensile properties of FeCoNiCr high-entropy alloys. *Intermetallics*, **2016**, 79, 41-52	3.5	145
49	Nanocrystallization in a Cu-doped Fe-based metallic glass. *Journal of Alloys and Compounds*, **2016**, 688, 822-827	5.7	11
48	Deformation-induced spatiotemporal fluctuation, evolution and localization of strain fields in a bulk metallic glass. *International Journal of Plasticity*, **2015**, 71, 136-145	7.6	40
47	Development of electrochemical supercapacitors with uniform nanoporous silver network. *Electrochimica Acta*, **2015**, 182, 224-229	6.7	32
46	Experimental and theoretical studies on site preference of Ti in Nd2(Fe,Ti)14B. *Journal of Magnetism and Magnetic Materials*, **2015**, 379, 108-111	2.8	5
45	Inherent structure length in metallic glasses: simplicity behind complexity. *Scientific Reports*, **2015**, 5, 12137	4.9	18
44	Deformation-Induced Martensitic Transformation in Cu-Zr-Zn Bulk Metallic Glass Composites. *Metals*, **2015**, 5, 2134-2147	2.3	16
43	Direct synchrotron x-ray measurements of local strain fields in elastically and plastically bent metallic glasses. *Intermetallics*, **2015**, 67, 132-137	3.5	5
42	Nanoporous silver with tunable pore characteristics and superior surface enhanced Raman scattering. *Corrosion Science*, **2014**, 84, 159-164	6.8	49
41	Effects of Al addition on structural evolution and tensile properties of the FeCoNiCrMn high-entropy alloy system. *Acta Materialia*, **2014**, 62, 105-113	8.4	687
40	Alloying effects of the elements with a positive heat of mixing on the glass forming ability of Al-La-Ni amorphous alloys. *Science China: Physics, Mechanics and Astronomy*, **2014**, 57, 122-127	3.6	4
39	An electronic criterion for assessing intrinsic brittleness of metallic glasses. *Journal of Chemical Physics*, **2014**, 141, 024503	3.9	8
38	In-situ neutron diffraction study of deformation behavior of a multi-component high-entropy alloy. *Applied Physics Letters*, **2014**, 104, 051910	3.4	107
37	The Phase Competition and Stability of High-Entropy Alloys. *Jom*, **2014**, 66, 1973-1983	2.1	47
36	Designing Bulk Metallic Glass Composites with Enhanced Formability and Plasticity. *Journal of Materials Science and Technology*, **2014**, 30, 566-575	9.1	40

35	Effects of Sn addition on phase formation and mechanical properties of TiCu-based bulk metallic glass composites. *Intermetallics*, **2013**, 42, 68-76	3.5	33
34	Hot corrosion behaviour and its mechanism of a new alumina-forming austenitic stainless steel in molten sodium sulphate. *Corrosion Science*, **2013**, 77, 202-209	6.8	30
33	Alloying effects on mechanical properties of the CuZrAl bulk metallic glass composites. *Computational Materials Science*, **2013**, 79, 187-192	3.2	12
32	Strong work-hardening behavior in a Ti-based bulk metallic glass composite. *Scripta Materialia*, **2013**, 69, 73-76	5.6	57
31	Plasticity improvement in a bulk metallic glass composed of an open-cell Cu foam as the skeleton. *Composites Science and Technology*, **2013**, 75, 49-54	8.6	15
30	Effect of mechanical tension on corrosive and thermal properties of Cu50Zr40Ti10 metallic glass. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2013**, 588, 49-58	5.3	12
29	Effects of density difference of constituent elements on glass formation in TiCu-based bulk metallic glasses. *Progress in Natural Science: Materials International*, **2013**, 23, 469-474	3.6	1
28	Grain growth and the HallPetch relationship in a high-entropy FeCrNiCoMn alloy. *Scripta Materialia* , **2013**, 68, 526-529	5.6	472
27	Fe-based bulk metallic glass composites without any metalloid elements. *Acta Materialia*, **2013**, 61, 3214832223	4	19
26	Enhancing glass-forming ability via frustration of nano-clustering in alloys with a high solvent content. *Scientific Reports*, **2013**, 3, 1983	4.9	26
25	Designing novel bulk metallic glass composites with a high aluminum content. *Scientific Reports*, **2013**, 3, 3353	4.9	22
24	Nano-network mediated high strength and large plasticity in an Al-based alloy. *Materials Letters*, **2012**, 84, 59-62	3.3	17
23	Role of rare-earth elements in glass formation of AlCaNi amorphous alloys. *Journal of Alloys and Compounds*, **2012**, 513, 387-392	5.7	13
22	Ductilizing bulk metallic glass composite by tailoring stacking fault energy. *Physical Review Letters*, **2012**, 109, 245506	7.4	73
21	Effects of alloying elements on glass formation, mechanical and soft-magnetic properties of Fe-based metallic glasses. *Intermetallics*, **2011**, 19, 1502-1508	3.5	79
20	Formation of CuZrAl bulk metallic glass composites with improved tensile properties. *Acta Materialia*, **2011**, 59, 2928-2936	8.4	257
19	Magnetocaloric effect in Er-Al-Co bulk metallic glasses. *Science Bulletin*, **2011**, 56, 3978-3983		8
18	Relationship between composite structures and compressive properties in CuZr-based bulk metallic glass system. *Science Bulletin*, **2011**, 56, 3960-3964		19

17	Effects of nanocrystal formation on the soft magnetic properties of Fe-based bulk metallic glasses. *Applied Physics Letters*, **2011**, 99, 052504	3.4	44
16	Interpreting size effects of bulk metallic glasses based on a size-independent critical energy density. *Intermetallics*, **2010**, 18, 157-160	3.5	36
15	Size effects on the compressive deformation behaviour of a brittle Fe-based bulk metallic glass. *Philosophical Magazine Letters*, **2010**, 90, 403-412	1	23
14	Effects of Mo additions on the glass-forming ability and magnetic properties of bulk amorphous Fe-C-Si-B-P-Mo alloys. *Science China: Physics, Mechanics and Astronomy*, **2010**, 53, 430-434	3.6	25
13	Effects of cooling rates on the mechanical properties of a Ti-based bulk metallic glass. *Science China: Physics, Mechanics and Astronomy*, **2010**, 53, 394-398	3.6	30
12	Bulk metallic glass composites with transformation-mediated work-hardening and ductility. *Advanced Materials*, **2010**, 22, 2770-3	24	369
11	Effects of drawing on the tensile fracture strength and its reliability of small-sized metallic glasses. *Acta Materialia*, **2010**, 58, 2564-2576	8.4	32
10	Glass-forming ability enhanced by proper additions of oxygen in a Fe-based bulk metallic glass. *Applied Physics Letters*, **2009**, 95, 161905	3.4	49
9	A quantitative link between microplastic instability and macroscopic deformation behaviors in metallic glasses. *Journal of Applied Physics*, **2009**, 106, 083512	2.5	11
8	Alloying effects of iridium on glass formation and glass-forming ability of the Zr-Cu-Al system. *Journal of Materials Research*, **2009**, 24, 1619-1623	2.5	5
7	Nonlinear tensile deformation behavior of small-sized metallic glasses. *Scripta Materialia*, **2009**, 61, 564-567	3.6	32
6	Glass formation and magnetic properties of Fe□SiBP(Cr,Al,Co) bulk metallic glasses fabricated using industrial raw materials. *Journal of Magnetism and Magnetic Materials*, **2009**, 321, 2833-2837	2.8	36
5	Effects of metalloid elements on the glass-forming ability of Fe-based alloys. *Journal of Alloys and Compounds*, **2009**, 467, 187-190	5.7	34
4	Aluminum-rich bulk metallic glasses. *Scripta Materialia*, **2008**, 59, 1159-1162	5.6	42
3	Large magnetocaloric effect in Gd36Y20Al24Co20 bulk metallic glass. *Journal of Alloys and Compounds*, **2008**, 457, 541-544	5.7	56
2	Composition effects on glass-forming ability and its indicator □ *Intermetallics*, **2008**, 16, 410-417	3.5	12
1	Oxygen effects on plastic deformation of a Zr-based bulk metallic glass. *Applied Physics Letters*, **2008**, 92, 011915	3.4	39