Jun-Wei Qiao

List of Publications by Year
in descending order

112 papers	3,428 citations	159585 30 h-index	155660 55 g-index
115 all docs	115 docs citations	115 times ranked	2110 citing authors

#	Article	IF	Citations
1	Metallic glass matrix composites. Materials Science and Engineering Reports, 2016, 100, 1-69.	31.8	424
2	Microstructure and wear properties of nitrided AlCoCrFeNi high-entropy alloy. Materials Chemistry and Physics, 2018, 210, 233-239.	4.0	160
3	High-Entropy Alloys in Hexagonal Close-Packed Structure. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 3322-3332.	2.2	158
4	The tribological properties of Al0.6CoCrFeNi high-entropy alloy with the Ïƒ phase precipitation at elevated temperature. Journal of Alloys and Compounds, 2019, 777, 180-189.	5.5	130
5	Large plasticity and tensile necking of Zr-based bulk-metallic-glass-matrix composites synthesized by the Bridgman solidification. Applied Physics Letters, 2009, 94, 151905.	3.3	124
6	Tuned Critical Avalanche Scaling in Bulk Metallic Glasses. Scientific Reports, 2014, 4, 4382.	3.3	121
7	Strengthening in Al0.25CoCrFeNi high-entropy alloys by cold rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 707, 593-601.	5.6	99
8	Morphology Transition from Dendrites to Equiaxed Grains for AlCoCrFeNi High-Entropy Alloys by Copper Mold Casting and Bridgman Solidification. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 2625-2630.	2.2	89
9	In-situ Dendrite/Metallic Glass Matrix Composites: A Review. Journal of Materials Science and Technology, 2013, 29, 685-701.	10.7	87
10	Tribological Properties of AlCrCuFeNi2 High-Entropy Alloy in Different Conditions. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 3312-3321.	2.2	80
11	Wear behavior of Al_{0.6}CoCrFeNi high-entropy alloys: Effect of environments. Journal of Materials Research, 2018, 33, 3310-3320.	2.6	80
12	A Tensile Deformation Model for In-situ Dendrite/Metallic Glass Matrix Composites. Scientific Reports, 2013, 3, 2816.	3.3	79
13	Temperature Effects on Deformation and Serration Behavior of High-Entropy Alloys (HEAs). Jom, 2014, 66, 2002-2008.	1.9	72
14	Nanoscale serration and creep characteristics of Al0.5CoCrCuFeNi high-entropy alloys. Journal of Alloys and Compounds, 2018, 752, 464-475.	5.5	69
15	Optimizing mechanical properties of AlCoCrFeNiTi x high-entropy alloys by tailoring microstructures. Acta Metallurgica Sinica (English Letters), 2013, 26, 277-284.	2.9	67
16	Surface strengthening in Al0.25CoCrFeNi high-entropy alloy by boronizing. Materials Letters, 2019, 238, 258-260.	2.6	65
17	Ultrafine-grained dual phase Al0.45CoCrFeNi high-entropy alloys. Materials and Design, 2019, 180, 107910.	7.0	64
18	Effect of nitriding on the tribological properties of Al1.3CoCuFeNi2 high-entropy alloy. Journal of Alloys and Compounds, 2017, 725, 365-372.	5.5	62

#	Article	IF	Citations
19	Plastic Deformation of Al0.3CoCrFeNi and AlCoCrFeNi High-Entropy Alloys Under Nanoindentation. Journal of Materials Engineering and Performance, 2015, 24, 3077-3083.	2.5	53
20	Rare-earth high entropy alloys with hexagonal close-packed structure. Journal of Applied Physics, 2018, 124, .	2.5	52
21	Effects of Temperature on Serrated Flows of Al0.5CoCrCuFeNi High-Entropy Alloy. Jom, 2015, 67, 2314-2320.	1.9	47
22	A Brief Review of High Entropy Alloys and Serration Behavior and Flow Units. Journal of Iron and Steel Research International, 2016, 23, 2-6.	2.8	47
23	Tensile softening of metallic-glass-matrix composites in the supercooled liquid region. Applied Physics Letters, 2012, 100, .	3.3	42
24	Serrated flow behaviors of a Zr-based bulk metallic glass by nanoindentation. Journal of Applied Physics, 2014, 115, .	2.5	36
25	Nanoindentation characterised plastic deformation of a Al_{0.5}CoCrFeNi high entropy alloy. Materials Science and Technology, 2015, 31, 1244-1249.	1.6	34
26	Dry Sliding Tribological Properties of a Dendrite-reinforced Zr-based Bulk Metallic Glass Matrix Composite. Journal of Materials Science and Technology, 2014, 30, 576-583.	10.7	33
27	Origin of serrated flow in bulk metallic glasses. Journal of the Mechanics and Physics of Solids, 2019, 124, 634-642.	4.8	33
28	Surface modification of plasma nitriding on Al CoCrFeNi high-entropy alloys. Journal of Materials Science and Technology, 2020, 48, 140-145.	10.7	33
29	Preternatural Hexagonal High-Entropy Alloys: A Review. Acta Metallurgica Sinica (English Letters), 2020, 33, 1033-1045.	2.9	32
30	Superior Mechanical Properties of AlCoCrFeNiTi x High-Entropy Alloys upon Dynamic Loading. Journal of Materials Engineering and Performance, 2016, 25, 451-456.	2.5	31
31	Deformation Behavior of Al0.25CoCrFeNi High-Entropy Alloy after Recrystallization. Metals, 2017, 7, 111.	2.3	31
32	Composition mediated serration dynamics in Zr-based bulk metallic glasses. Applied Physics Letters, 2015, 107, .	3.3	30
33	Crystallization pathways of liquid-bcc transition for a model iron by fast quenching. Scientific Reports, 2015, 5, 16956.	3.3	29
34	Complexity analysis of serrated flows in a bulk metallic glass under constrained and unconstrained conditions. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 771, 138585.	5.6	26
35	Influence of lanthanum on passivity behavior of CrMnFeNi high entropy alloys. Materials Chemistry and Physics, 2021, 265, 124509.	4.0	26
36	Quasi-static and dynamic deformation behaviors of in situ Zr-based bulk-metallic-glass-matrix composites. Journal of Materials Research, 2010, 25, 2264-2270.	2.6	25

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37	Nanoindentation deformation of a bi-phase AlCrCuFeNi2 alloy. Journal of Alloys and Compounds, 2014, 608, 49-53.	5.5	25
38	Revealing the relationship between microstructures, textures, and mechanical behaviors of cold-rolled Al0.1CoCrFeNi high-entropy alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 804, 140752.	5.6	24
39	Structure prediction in high-entropy alloys with machine learning. Applied Physics Letters, 2021, 118, .	3.3	24
40	Insights from the Lattice-Strain Evolution on Deformation Mechanisms in Metallic-Glass-Matrix Composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 2431-2442.	2.2	23
41	Twinning-induced plasticity (TWIP) and work hardening in Ti-based metallic glass matrix composites. Scientific Reports, 2017, 7, 1877.	3.3	22
42	Tribological Behavior of Boronized Fe40Mn20Cr20Ni20 High-Entropy Alloys. Metals, 2021, 11, 1561.	2.3	22
43	Effect of Strain Rate on Deformation Behavior of AlCoCrFeNi High-Entropy Alloy by Nanoindentation. Journal of Materials Engineering and Performance, 2016, 25, 2255-2260.	2.5	21
44	An improved tensile deformation model for in-situ dendrite/metallic glass matrix composites. Scientific Reports, 2015, 5, 13964.	3.3	20
45	Strain rate sensitivity of nanoindentation creep in an AlCoCrFeNi high-entropy alloy. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	20
46	Serration Dynamics in a Zr-Based Bulk Metallic Glass. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 2404-2414.	2.2	19
47	High-Entropy Alloys (HEAs). Metals, 2018, 8, 108.	2.3	19
48	Deformation behavior and plastic instability of boronized Al0.25CoCrFeNi high-entropy alloys. International Journal of Minerals, Metallurgy and Materials, 2020, 27, 1363-1370.	4.9	19
49	Strengthening of an Al0.45CoCrFeNi high-entropy alloy via in situ fabricated duplex-structured composites. Journal of Materials Science, 2020, 55, 7894-7909.	3.7	19
50	Tensile deformation mechanisms of an in-situ Ti-based metallic glass matrix composite at cryogenic temperature. Scientific Reports, 2016, 6, 32287.	3.3	18
51	Successive strain hardening mechanisms induced by transformation induced plasticity in Fe60Mn20Co10Cr10 high entropy alloys. Journal of Applied Physics, 2021, 129, .	2.5	18
52	The role of the interface in a Tiâ€based metallic glass matrix composite with in situ dendrite reinforcement. Surface and Interface Analysis, 2014, 46, 293-296.	1.8	16
53	Microyielding of Core-Shell Crystal Dendrites in a Bulk-metallic-glass Matrix Composite. Scientific Reports, 2015, 4, 4394.	3.3	16
54	Self-organized Criticality Behavior in Bulk Metallic Glasses. Journal of Iron and Steel Research International, 2016, 23, 7-13.	2.8	16

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55	Tension-Tension-Fatigue Behaviors of a Zr-Based Bulk-Metallic-Glass-Matrix Composite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 2530-2534.	2.2	15
56	Improved plasticity of bulk metallic glasses by electrodeposition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 615, 240-246.	5.6	15
57	Tensile strength prediction of dual-phase Al0.6CoCrFeNi high-entropy alloys. International Journal of Minerals, Metallurgy and Materials, 2020, 27, 1341-1346.	4.9	14
58	Dendritic and spherical crystal reinforced metallic glass matrix composites. International Journal of Minerals, Metallurgy and Materials, 2013, 20, 386-392.	4.9	12
59	Exponential decay of shearing stress during jerky flows in a Zr-based bulk metallic glass. AIP Advances, 2013, 3, .	1.3	12
60	FCC-to-HCP Phase Transformation in CoCrNix Medium-Entropy Alloys. Acta Metallurgica Sinica (English Letters), 2020, 33, 1151-1158.	2.9	12
61	Comparison of electrochemical behaviour between La-free and La-containing CrMnFeNi HEA by Mottâ€“Schottky analysis and EIS measurements. Corrosion Engineering Science and Technology, 2021, 56, 171-178.	1.4	12
62	Structural disorder in metallic glass-forming liquids. Scientific Reports, 2016, 6, 27708.	3.3	11
63	Serration Behavior in Zr-Cu-Al Glass-forming Systems. Journal of Iron and Steel Research International, 2016, 23, 42-47.	2.8	11
64	Prediction of Strength and Ductility in Partially Recrystallized CoCrFeNiTi0.2 High-Entropy Alloy. Entropy, 2019, 21, 389.	2.2	11
65	Achieving work hardening by forming boundaries on the nanoscale in a Ti-based metallic glass matrix composite. Journal of Materials Science and Technology, 2020, 50, 192-203.	10.7	11
66	Correlation between initial structure and athermal quasi-static compressive deformation in a metallic glass. Journal of Alloys and Compounds, 2017, 699, 274-277.	5.5	10
67	The Corrosion Behavior of Ti-Based Metallic Glass Matrix Composites in the H2SO4 Solution. Metals, 2018, 8, 52.	2.3	10
68	Tuning Cr-rich nanoprecipitation and heterogeneous structure in equiatomic CrFeNi medium-entropy stainless alloys. Journal of Iron and Steel Research International, 2022, 29, 529-536.	2.8	10
69	Dynamic tensile mechanisms and constitutive relationship in CrFeNi medium entropy alloys at room and cryogenic temperatures. Physical Review Materials, 2021, 5, .	2.4	10
70	Fabrication and Mechanical Characterization of Ti-Based Metallic Glass Matrix Composites by the Bridgman Solidification. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2357-2362.	2.2	9
71	Corrosion behavior of in situ dendrite-reinforced Zr-based metallic glass matrix composites in NaCl solutions of varied concentrations. Materials Chemistry and Physics, 2015, 162, 326-331.	4.0	9
72	Tribological Properties of a Dendrite-reinforced Ti-based Metallic Glass Matrix Composite under Different Conditions. Journal of Iron and Steel Research International, 2016, 23, 57-63.	2.8	9

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73	Triple-Phase Eutectic High-Entropy Alloy: Al10Co18Cr18Fe18Nb10Ni26. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 1314-1320.	2.2	9
74	Serration and Noise Behavior in Advanced Materials. Journal of Iron and Steel Research International, 2016, 23, 1-1.	2.8	8
75	Statistical analysis on strain-rate effects during serrations in a Zr-based bulk metallic glass. Journal of Iron and Steel Research International, 2017, 24, 455-461.	2.8	8
76	Relation Between the Defect Interactions and the Serration Dynamics in a Zr-Based Bulk Metallic Glass. Applied Sciences (Switzerland), 2020, 10, 3892.	2.5	8
77	Spatialâ€“Temporal evolution of shear banding in bulk metallic glasses. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 800, 140286.	5.6	8
78	Formation and deformation mechanisms in gradient nanostructured NiCoCrFe high entropy alloys upon supersonic impacts. Applied Physics Letters, 2021, 119, .	3.3	8
79	Corrosion Behavior of Ti-Based In Situ Dendrite-Reinforced Metallic Glass Matrix Composites in Various Solutions. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 2399-2403.	2.2	7
80	Universality of slip avalanches in a ductile Fe-based bulk metallic glass. Journal of Iron and Steel Research International, 2017, 24, 366-371.	2.8	7
81	Local Deformation and Texture of Cold-Rolled AA6061 Aluminum Alloy. Materials, 2018, 11, 1866.	2.9	7
82	Corrosion Behavior of Al0.1CoCrFeNi High Entropy Alloy in Various Chloride-Containing Solutions. Frontiers in Materials, 2021, 7, .	2.4	7
83	A universal criterion for the failure threshold in slowly sheared bulk metallic glasses. Journal of Applied Physics, 2021, 129, .	2.5	7
84	Enhanced strength and toughness in 40CrNiMo steels by austempering below martensite start temperature. Journal of Iron and Steel Research International, 2022, 29, 810-818.	2.8	7
85	Hardening overwhelming softening in Ti-based metallic glass composites upon cold rolling. Intermetallics, 2021, 130, 107066.	3.9	6
86	Effect of deep cryogenic cycling treatment on shear transformation zone volume and size of Zr-based metallic glass. Journal of Materials Research, 2021, 36, 2047-2055.	2.6	6
87	Deformation mechanisms in hexagonal close-packed high-entropy alloys. Journal of Applied Physics, 2021, 129, .	2.5	6
88	Tensile Mechanical Behaviors of In Situ Metallic Glass Matrix Composites at Ambient Temperature and in Supercooled Liquid Region. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2382-2388.	2.2	5
89	In-situ Tension of Dendrite-Reinforced Zr-based Metallic-Glass-Matrix Composites. Acta Metallurgica Sinica (English Letters), 2014, 27, 621-626.	2.9	5
90	Effect of strain rates on deformation behaviors of an in situ Ti-based metallic glass matrix composite. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	5

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91	Failure of a Ti-Based Metallic Glass Matrix Composite Upon High-Temperature Annealing. Metals and Materials International, 2020, 26, 285-291.	3.4	5
92	Probing into the Yield Plateau Phenomenon in Commercially Pure Titanium During Tensile Tests. Acta Metallurgica Sinica (English Letters), 2021, 34, 701-709.	2.9	5
93	Twinning induced remarkable strain hardening in a novel Fe50Mn20Cr20Ni10 medium entropy alloy. Journal of Iron and Steel Research International, 2021, 28, 1463-1470.	2.8	5
94	Multiple structural factors to influence the dynamics of icosahedral clusters in the Al90Sm10 super-cooled metallic liquid. Journal of Non-Crystalline Solids, 2021, 565, 120848.	3.1	5
95	Effect of sulfuric acid concentration on corrosion behavior of Al0.1CoCrFeNi high-entropy alloy. Journal of Physics and Chemistry of Solids, 2022, 161, 110397.	4.0	5
96	Optimize the Mechanical Properties of Al0.6CoCrFeNi High-Entropy Alloys by Thermo-Mechanical Processing. Metals, 2022, 12, 178.	2.3	5
97	Entropy versus enthalpy in hexagonal-close-packed high-entropy alloys. Rare Metals, 2022, 41, 2906-2920.	7.1	4
98	The Self-Organized Critical Behavior in Pd-based Bulk Metallic Glass. Metals, 2015, 5, 1188-1196.	2.3	3
99	Fracture Morphology and Local Deformation Characteristics in the Metallic Glass Matrix Composite Under Tension. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 1545-1550.	2.2	3
100	Investigation of Mode I Notch Toughness of Zr41.2Ti13.8Cu10Ni12.5Be22.5 Metallic Glass under Dynamic Loading Conditions. Journal of Materials Engineering and Performance, 2019, 28, 6025-6032.	2.5	3
101	Work hardening in Ti48Zr29Ni6Ta1Be16 metallic glass matrix composites at cryogenic temperature. Journal of Applied Physics, 2022, 131, .	2.5	3
102	Scattering mechanical performances for brittle bulk metallic glasses. AIP Advances, 2014, 4, .	1.3	2
103	Dynamic Deformation Behaviors of an In Situ Ti-Based Metallic Glass Matrix Composite. Journal of Materials Engineering and Performance, 2016, 25, 4729-4734.	2.5	2
104	Texture Evolution Behavior and Its Triggered Mechanical Anisotropy of CP Ti During Severe Cold Rolling and Subsequent Annealing. Acta Metallurgica Sinica (English Letters), 2020, 33, 1271-1282.	2.9	2
105	Flow serrations of rejuvenation behaviour through cryogenic thermal cycling for Zr-based bulk metallic glass. Philosophical Magazine, 2021, 101, 2261-2272.	1.6	2
106	Isothermal Compression and Concomitant Dynamic Recrystallization Behavior of Ti-6.5Al-3.5Mo-1.5Zr-0.3Si Alloy with Initial Martensitic Microstructure. Journal of Materials Engineering and Performance, 2020, 29, 3361-3372.	2.5	2
107	Evolution of hardness and modulus within a cold-rolled in situ dendrite-reinforced metallic glass matrix composites. Materials Research Innovations, 2015, 19, S170-S174.	2.3	1
108	Quasi-Static Tensile Behaviors, Mechanisms, and Constitutive Descriptions of Commercially Pure Titanium at Diverse Strain Rates in Ambient Air and Liquid Nitrogen. Journal of Materials Engineering and Performance, 2021, 30, 944-954.	2.5	1

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109	Strain rate effects on the yielding strength and maximum temperature at shear bands in a Zr-based bulk metallic glass. Journal of Applied Physics, 2022, 131, 175101.	2.5	1
110	Non-linear behavior in advanced materials. Journal of Iron and Steel Research International, 2017, 24, 357-357.	2.8	0
111	Preface: Metastable alloys. Journal of Iron and Steel Research International, 2018, 25, 253-253.	2.8	0
112	Exceptional Phase-Transformation Strengthening of Fe50Mn20Cr20Ni10 Medium-Entropy Alloys at Cryogenic Temperature. Metals, 2022, 12, 643.	2.3	0