

Peter K Liaw

List of Publications by Year in descending order

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289
papers

23,631
citations

10351

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docs citations

297
times ranked

7916
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#	ARTICLE	IF	CITATIONS
1	Microstructures and properties of high-entropy alloys. <i>Progress in Materials Science</i> , 2014, 61, 1-93.	16.0	4,761
2	Science and technology in high-entropy alloys. <i>Science China Materials</i> , 2018, 61, 2-22.	3.5	679
3	Corrosion-Resistant High-Entropy Alloys: A Review. <i>Metals</i> , 2017, 7, 43.	1.0	569
4	Alloy Design and Properties Optimization of High-Entropy Alloys. <i>Jom</i> , 2012, 64, 830-838.	0.9	540
5	Corrosion of Al CoCrFeNi high-entropy alloys: Al-content and potential scan-rate dependent pitting behavior. <i>Corrosion Science</i> , 2017, 119, 33-45.	3.0	535
6	Deviation from high-entropy configurations in the atomic distributions of a multi-principal-element alloy. <i>Nature Communications</i> , 2015, 6, 5964.	5.8	530
7	Enhanced strength-ductility synergy in ultrafine-grained eutectic high-entropy alloys by inheriting microstructural lamellae. <i>Nature Communications</i> , 2019, 10, 489.	5.8	505
8	Mechanical behavior of high-entropy alloys. <i>Progress in Materials Science</i> , 2021, 118, 100777.	16.0	492
9	High-entropy Alloys with High Saturation Magnetization, Electrical Resistivity and Malleability. <i>Scientific Reports</i> , 2013, 3, 1455.	1.6	436
10	Metallic glass matrix composites. <i>Materials Science and Engineering Reports</i> , 2016, 100, 1-69.	14.8	424
11	High-entropy Al _{0.3} CoCrFeNi alloy fibers with high tensile strength and ductility at ambient and cryogenic temperatures. <i>Acta Materialia</i> , 2017, 123, 285-294.	3.8	378
12	Fatigue behavior of a wrought Al _{0.5} CoCrCuFeNi two-phase high-entropy alloy. <i>Acta Materialia</i> , 2015, 99, 247-258.	3.8	355
13	Microstructures and properties of high-entropy alloy films and coatings: a review. <i>Materials Research Letters</i> , 2018, 6, 199-229.	4.1	345
14	Lattice distortion in a strong and ductile refractory high-entropy alloy. <i>Acta Materialia</i> , 2018, 160, 158-172.	3.8	325
15	Gradient cell-structured high-entropy alloy with exceptional strength and ductility. <i>Science</i> , 2021, 374, 984-989.	6.0	316
16	Promising properties and future trend of eutectic high entropy alloys. <i>Scripta Materialia</i> , 2020, 187, 202-209.	2.6	308
17	Hierarchical crack buffering triples ductility in eutectic herringbone high-entropy alloys. <i>Science</i> , 2021, 373, 912-918.	6.0	304
18	Homogenization of Al CoCrFeNi high-entropy alloys with improved corrosion resistance. <i>Corrosion Science</i> , 2018, 133, 120-131.	3.0	283

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19	Guidelines in predicting phase formation of high-entropy alloys. <i>MRS Communications</i> , 2014, 4, 57-62.	0.8	275
20	Tailoring magnetic behavior of CoFeMnNiX (X= Al, Cr, Ga, and Sn) high entropy alloys by metal doping. <i>Acta Materialia</i> , 2017, 130, 10-18.	3.8	220
21	Serration and noise behaviors in materials. <i>Progress in Materials Science</i> , 2017, 90, 358-460.	16.0	203
22	Tensile ductility of an AlCoCrFeNi multi-phase high-entropy alloy through hot isostatic pressing (HIP) and homogenization. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 647, 229-240.	2.6	199
23	Understanding phase stability of Al-Co-Cr-Fe-Ni high entropy alloys. <i>Materials and Design</i> , 2016, 109, 425-433.	3.3	197
24	Multistage work hardening assisted by multi-type twinning in ultrafine-grained heterostructural eutectic high-entropy alloys. <i>Materials Today</i> , 2020, 41, 62-71.	8.3	197
25	A novel bulk eutectic high-entropy alloy with outstanding as-cast specific yield strengths at elevated temperatures. <i>Scripta Materialia</i> , 2021, 204, 114132.	2.6	192
26	Alloying and Processing Effects on the Aqueous Corrosion Behavior of High-Entropy Alloys. <i>Entropy</i> , 2014, 16, 895-911.	1.1	163
27	Design of Light-Weight High-Entropy Alloys. <i>Entropy</i> , 2016, 18, 333.	1.1	162
28	Mechanical, corrosion, and wear properties of biomedical Ti-Zr-Nb-Ta-Mo high entropy alloys. <i>Journal of Alloys and Compounds</i> , 2021, 861, 157997.	2.8	152
29	Fracture resistance of high entropy alloys: A review. <i>Intermetallics</i> , 2018, 99, 69-83.	1.8	149
30	A review on the fatigue behavior of Ti-6Al-4V fabricated by electron beam melting additive manufacturing. <i>International Journal of Fatigue</i> , 2019, 119, 173-184.	2.8	149
31	In-situ electrochemical-AFM study of localized corrosion of Al CoCrFeNi high-entropy alloys in chloride solution. <i>Applied Surface Science</i> , 2018, 439, 533-544.	3.1	147
32	Additive Manufacturing of High-Entropy Alloys: A Review. <i>Entropy</i> , 2018, 20, 937.	1.1	142
33	Strong grain-size effect on deformation twinning of an Al _{0.1} CoCrFeNi high-entropy alloy. <i>Materials Research Letters</i> , 2017, 5, 276-283.	4.1	131
34	Phase stability and transformation in a light-weight high-entropy alloy. <i>Acta Materialia</i> , 2018, 146, 280-293.	3.8	131
35	A cuboidal B2 nanoprecipitation-enhanced body-centered-cubic alloy Al _{0.7} CoCrFe ₂ Ni with prominent tensile properties. <i>Scripta Materialia</i> , 2016, 120, 85-89.	2.6	130
36	Fracture Toughness and Fatigue Crack Growth Behavior of As-Cast High-Entropy Alloys. <i>Jom</i> , 2015, 67, 2288-2295.	0.9	129

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37	Excellent ductility and serration feature of metastable CoCrFeNi high-entropy alloy at extremely low temperatures. <i>Science China Materials</i> , 2019, 62, 853-863.	3.5	129
38	Synthesis and cyclic oxidation behavior of a (Ni, Pt) Al coating on a desulfurized Ni-base superalloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1999, 30, 2679-2687.	1.1	128
39	Microstructures and Crackling Noise of Al _x NbTiMoV High Entropy Alloys. <i>Entropy</i> , 2014, 16, 870-884.	1.1	126
40	Large plasticity and tensile necking of Zr-based bulk-metallic-glass-matrix composites synthesized by the Bridgman solidification. <i>Applied Physics Letters</i> , 2009, 94, 151905.	1.5	124
41	Tuned Critical Avalanche Scaling in Bulk Metallic Glasses. <i>Scientific Reports</i> , 2014, 4, 4382.	1.6	121
42	Lattice Distortion Enhanced Yield Strength in a Refractory High Entropy Alloy. <i>Advanced Materials</i> , 2020, 32, e2004029.	11.1	121
43	Phase stability and microstructures of high entropy alloys ion irradiated to high doses. <i>Journal of Nuclear Materials</i> , 2016, 480, 100-108.	1.3	119
44	Effects of Pt incorporation on the isothermal oxidation behavior of chemical vapor deposition aluminide coatings. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2001, 32, 1727-1741.	1.1	117
45	High-velocity deformation of Al _{0.3} CoCrFeNi high-entropy alloy: Remarkable resistance to shear failure. <i>Scientific Reports</i> , 2017, 7, 42742.	1.6	116
46	Simultaneously enhancing the ultimate strength and ductility of high-entropy alloys via short-range ordering. <i>Nature Communications</i> , 2021, 12, 4953.	5.8	116
47	Chemical short-range orders and the induced structural transition in high-entropy alloys. <i>Scripta Materialia</i> , 2018, 144, 64-68.	2.6	115
48	First-principles and machine learning predictions of elasticity in severely lattice-distorted high-entropy alloys with experimental validation. <i>Acta Materialia</i> , 2019, 181, 124-138.	3.8	113
49	Two-glassy-phase bulk metallic glass with remarkable plasticity. <i>Applied Physics Letters</i> , 2007, 91, 131901.	1.5	112
50	High-throughput design of high-performance lightweight high-entropy alloys. <i>Nature Communications</i> , 2021, 12, 4329.	5.8	112
51	The BCC/B2 Morphologies in Al _x NiCoFeCr High-Entropy Alloys. <i>Metals</i> , 2017, 7, 57.	1.0	111
52	Predictive multiphase evolution in Al-containing high-entropy alloys. <i>Nature Communications</i> , 2018, 9, 4520.	5.8	107
53	Localized heating and fracture criterion for bulk metallic glasses. <i>Journal of Materials Research</i> , 2006, 21, 915-922.	1.2	106
54	Universal Quake Statistics: From Compressed Nanocrystals to Earthquakes. <i>Scientific Reports</i> , 2015, 5, 16493.	1.6	104

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55	Experiments and Model for Serration Statistics in Low-Entropy, Medium-Entropy and High-Entropy Alloys. <i>Scientific Reports</i> , 2015, 5, 16997.	1.6	103
56	Temperature dependence of elastic and plastic deformation behavior of a refractory high-entropy alloy. <i>Science Advances</i> , 2020, 6, .	4.7	101
57	Coherent Precipitation and Strengthening in Compositionally Complex Alloys: A Review. <i>Entropy</i> , 2018, 20, 878.	1.1	100
58	Recrystallization Behavior of CoCrCuFeNi High-Entropy Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 1481-1487.	1.1	99
59	Strengthening in Al _{0.25} CoCrFeNi high-entropy alloys by cold rolling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 707, 593-601.	2.6	99
60	Nanoprecipitate-strengthened High-Entropy Alloys. <i>Advanced Science</i> , 2021, 8, e2100870.	5.6	97
61	A Successful Synthesis of the CoCrFeNiAl _{0.3} Single-Crystal, High-Entropy Alloy by Bridgman Solidification. <i>Jom</i> , 2013, 65, 1751-1758.	0.9	90
62	Friction Stir Processing of a High Entropy Alloy Al _{0.1} CoCrFeNi. <i>Jom</i> , 2015, 67, 1007-1013.	0.9	89
63	Superior High-Temperature Strength in a Supersaturated Refractory High-Entropy Alloy. <i>Advanced Materials</i> , 2021, 33, e2102401.	11.1	89
64	First-principles prediction of high-entropy-alloy stability. <i>Npj Computational Materials</i> , 2017, 3, .	3.5	87
65	Characterization of the temperature evolution during high-cycle fatigue of the ULTIMET superalloy: Experiment and theoretical modeling. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2001, 32, 2279-2296.	1.1	86
66	Anomalies in the deformation mechanism and kinetics of coarse-grained high entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 654, 256-263.	2.6	83
67	Tensile deformation behavior and mechanical properties of a bulk cast Al _{0.9} CoFeNi ₂ eutectic high-entropy alloy. <i>Journal of Materials Science and Technology</i> , 2021, 61, 119-124.	5.6	82
68	Understanding the Cu-Zn brass alloys using a short-range-order cluster model: significance of specific compositions of industrial alloys. <i>Scientific Reports</i> , 2014, 4, 7065.	1.6	81
69	Effects of sulfur impurity on the scale adhesion behavior of a desulfurized Ni-based superalloy aluminized by chemical vapor deposition. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1998, 29, 833-841.	1.1	80
70	Wear behavior of Al _{0.6} CoCrFeNi high-entropy alloys: Effect of environments. <i>Journal of Materials Research</i> , 2018, 33, 3310-3320.	1.2	80
71	Fundamental electronic structure and multiatomic bonding in 13 biocompatible high-entropy alloys. <i>Npj Computational Materials</i> , 2020, 6, .	3.5	79
72	Ultrastrong and ductile BCC high-entropy alloys with low-density via dislocation regulation and nanoprecipitates. <i>Journal of Materials Science and Technology</i> , 2022, 110, 109-116.	5.6	79

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73	Thin film metallic glasses: Preparations, properties, and applications. <i>Jom</i> , 2010, 62, 19-24.	0.9	78
74	Bio-corrosion behavior and in vitro biocompatibility of equimolar TiZrHfNbTa high-entropy alloy. <i>Intermetallics</i> , 2020, 124, 106845.	1.8	74
75	Temperature Effects on Deformation and Serration Behavior of High-Entropy Alloys (HEAs). <i>Jom</i> , 2014, 66, 2002-2008.	0.9	72
76	Fatigue behavior of high-entropy alloys: A review. <i>Science China Technological Sciences</i> , 2018, 61, 168-178.	2.0	71
77	Nanoscale serration and creep characteristics of Al _{0.5} CoCrCuFeNi high-entropy alloys. <i>Journal of Alloys and Compounds</i> , 2018, 752, 464-475.	2.8	69
78	Enhanced fatigue resistance of a nickel-based hastelloy induced by a surface nanocrystallization and hardening process. <i>Philosophical Magazine Letters</i> , 2005, 85, 427-438.	0.5	68
79	A Review of the Serrated-Flow Phenomenon and Its Role in the Deformation Behavior of High-Entropy Alloys. <i>Metals</i> , 2020, 10, 1101.	1.0	65
80	Electrochemical corrosion behavior of a Zr-based bulk-metallic glass. <i>Applied Physics Letters</i> , 2007, 91, .	1.5	64
81	Deformation mechanisms in a precipitation-strengthened ferritic superalloy revealed by in situ neutron diffraction studies at elevated temperatures. <i>Acta Materialia</i> , 2015, 83, 137-148.	3.8	64
82	Strength can be controlled by edge dislocations in refractory high-entropy alloys. <i>Nature Communications</i> , 2021, 12, 5474.	5.8	64
83	Fundamental understanding of mechanical behavior of high-entropy alloys at low temperatures: A review. <i>Journal of Materials Research</i> , 2018, 33, 2998-3010.	1.2	63
84	Microstructural evolution of single Ni ₂ TiAl or hierarchical NiAl/Ni ₂ TiAl precipitates in Fe-Ni-Al-Cr-Ti ferritic alloys during thermal treatment for elevated-temperature applications. <i>Acta Materialia</i> , 2017, 127, 1-16.	3.8	62
85	Mechanical properties of the high-entropy alloy Ag _{0.5} CoCrCuFeNi at temperatures of 4.2â€“300â€“K. <i>Low Temperature Physics</i> , 2013, 39, 630-632.	0.2	61
86	Novel high entropy alloys of Fe _x Co _{1-x} NiMnGa with excellent soft magnetic properties. <i>Intermetallics</i> , 2018, 100, 1-8.	1.8	61
87	A 200nm thick glass-forming metallic film for fatigue-property enhancements. <i>Applied Physics Letters</i> , 2006, 88, 131902.	1.5	60
88	A novel ZrNbMoTaW refractory high-entropy alloy with in-situ forming heterogeneous structure. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 827, 142061.	2.6	59
89	Rate dependence of shear banding and serrated flows in a bulk metallic glass. <i>Journal of Materials Research</i> , 2006, 21, 2164-2167.	1.2	56
90	Enhanced strength-ductility synergy via novel bifunctional nano-precipitates in a high-entropy alloy. <i>International Journal of Plasticity</i> , 2022, 153, 103235.	4.1	56

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91	Nanoindentation Creep Behavior of an Al _{0.3} CoCrFeNi High-Entropy Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 5871-5875.	1.1	53
92	Temperature effects on the serrated behavior of an Al _{0.5} CoCrCuFeNi high-entropy alloy. Materials Chemistry and Physics, 2018, 210, 20-28.	2.0	52
93	A Novel Low-Activation VCrFeTa _x W _x (x = 0.1, 0.2, 0.3, 0.4, and 1) High-Entropy Alloys with Excellent Heat-Softening Resistance. Entropy, 2018, 20, 951.	1.1	52
94	Microstructures and mechanical properties of body-centered-cubic (Al,Ti) _{0.7} (Ni,Co,Fe,Cr) ₅ high entropy alloys with coherent B2/L21 nanoprecipitation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 737, 286-296.	2.6	52
95	Portevin-Le Chatelier mechanism in face-centered-cubic metallic alloys from low to high entropy. International Journal of Plasticity, 2019, 122, 212-224.	4.1	51
96	Deformation behavior of a Co-Cr-Fe-Ni-Mo medium-entropy alloy at extremely low temperatures. Materials Today, 2021, 50, 55-68.	8.3	51
97	Effects of Constituent Elements and Fabrication Methods on Mechanical Behavior of High-Entropy Alloys: A Review. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 1-28.	1.1	50
98	High-Throughput Calculations for High-Entropy Alloys: A Brief Review. Frontiers in Materials, 2020, 7, .	1.2	50
99	Structures and mechanical behaviors of Zr ₅₅ Cu ₃₅ Al ₁₀ bulk amorphous alloys at ambient and cryogenic temperatures. Physical Review B, 2006, 74, .	1.1	48
100	Shear strain in a shear band of a bulk-metallic glass in compression. Applied Physics Letters, 2007, 90, 181903.	1.5	48
101	A thermodynamic interpretation of the size-ratio limits for laves phase formation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 1449-1452.	1.1	47
102	Effects of Temperature on Serrated Flows of Al _{0.5} CoCrCuFeNi High-Entropy Alloy. Jom, 2015, 67, 2314-2320.	0.9	47
103	A Brief Review of High Entropy Alloys and Serration Behavior and Flow Units. Journal of Iron and Steel Research International, 2016, 23, 2-6.	1.4	47
104	Chemical-Affinity Disparity and Exclusivity Drive Atomic Segregation, Short-Range Ordering, and Cluster Formation in High-Entropy Alloys. Acta Materialia, 2021, 206, 116638.	3.8	45
105	Simultaneously enhanced strength-ductility of AlCoCrFeNi _{2.1} eutectic high-entropy alloy via additive manufacturing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 830, 142327.	2.6	45
106	Novel NiAl-strengthened high entropy alloys with balanced tensile strength and ductility. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 742, 636-647.	2.6	44
107	Effects of Cu and Zn on microstructures and mechanical behavior of the medium-entropy aluminum alloy. Journal of Alloys and Compounds, 2020, 820, 153092.	2.8	44
108	Machine-learning and high-throughput studies for high-entropy materials. Materials Science and Engineering Reports, 2022, 147, 100645.	14.8	44

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109	Infrared temperature mapping of ULTIMET alloy during high-cycle fatigue tests. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2000, 31, 1307-1310.	1.1	42
110	Influence of Strain Rate on Compressive Deformation Behavior of a Zr-Cu-Ni-Al Bulk Metallic Glass at Room Temperature. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 1491-1498.	1.1	42
111	Tensile softening of metallic-glass-matrix composites in the supercooled liquid region. Applied Physics Letters, 2012, 100, .	1.5	42
112	Enhancement of fatigue resistance by overload-induced deformation twinning in a CoCrFeMnNi high-entropy alloy. Acta Materialia, 2020, 201, 412-424.	3.8	41
113	Temperature dependence of serrated flows in compression in a bulk-metallic glass. Applied Physics Letters, 2006, 89, 261909.	1.5	39
114	A Low-Cost Lightweight Entropic Alloy with High Strength. Journal of Materials Engineering and Performance, 2018, 27, 6648-6656.	1.2	38
115	Nano-sized precipitate stability and its controlling factors in a NiAl-strengthened ferritic alloy. Scientific Reports, 2015, 5, 16081.	1.6	37
116	The predicted rate-dependent deformation behaviour and multistage strain hardening in a model heterostructured body-centered cubic high entropy alloy. International Journal of Plasticity, 2021, 145, 103073.	4.1	37
117	High-temperature mechanical behavior of Ti-6Al-4V alloy and TiC p /Ti-6Al-4V composite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 1569-1578.	1.1	36
118	In Situ Neutron-Diffraction Studies on the Creep Behavior of a Ferritic Superalloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1497-1508.	1.1	36
119	Mechanical behaviors and precipitation transformation of the lightweight high-Zn-content Alâ€“Znâ€“Liâ€“Mgâ€“Cu alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 802, 140637.	2.6	36
120	Incredible improvement in fatigue resistance of friction stir welded 7075-T651 aluminum alloy via surface mechanical rolling treatment. International Journal of Fatigue, 2019, 124, 15-25.	2.8	35
121	Origin of serrated flow in bulk metallic glasses. Journal of the Mechanics and Physics of Solids, 2019, 124, 634-642.	2.3	33
122	Pressure-induced phase transition in the AlCoCrFeNi high-entropy alloy. Scripta Materialia, 2019, 161, 88-92.	2.6	33
123	Microstructures and Properties of High-Entropy Materials: Modeling, Simulation, and Experiments. Advanced Engineering Materials, 2021, 23, .	1.6	33
124	Novel Ti-Zr-Hf-Nb-Fe refractory high-entropy alloys for potential biomedical applications. Journal of Alloys and Compounds, 2022, 906, 164383.	2.8	33
125	Preternatural Hexagonal High-Entropy Alloys: A Review. Acta Metallurgica Sinica (English Letters), 2020, 33, 1033-1045.	1.5	32
126	Recent Progress with BCC-Structured High-Entropy Alloys. Metals, 2022, 12, 501.	1.0	32

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127	Ni-Ti SMA-reinforced Al composites. <i>Jom</i> , 2000, 52, 52-56.	0.9	31
128	Thermal-imaging technologies for detecting damage during high-cycle fatigue. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004, 35, 15-23.	1.1	31
129	Characteristic length scales governing plasticity/brittleness of bulk metallic glasses at ambient temperature. <i>Applied Physics Letters</i> , 2010, 96, 011905.	1.5	31
130	Fatigue behavior of an Fe ₄₈ Cr ₁₅ Mo ₁₄ Er ₂ C ₁₅ B ₆ amorphous steel. <i>Journal of Materials Research</i> , 2007, 22, 544-550.	1.2	30
131	Graded microstructures of Al-Li-Mg-Zn-Cu entropic alloys under supergravity. <i>Science China Materials</i> , 2019, 62, 736-744.	3.5	30
132	Ultrasonic-vibration-enhanced plasticity of an entropic alloy at room temperature. <i>Acta Materialia</i> , 2022, 225, 117569.	3.8	30
133	Dislocation avalanche mechanism in slowly compressed high entropy alloy nanopillars. <i>Communications Physics</i> , 2018, 1, .	2.0	29
134	Microstructure and enhanced mechanical behavior of the Al ₇ Co ₂₄ Cr ₂₁ Fe ₂₄ Ni ₂₄ high-entropy alloy system by tuning the Cr content. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 733, 299-306.	2.6	29
135	Peierls barrier characteristic and anomalous strain hardening provoked by dynamic-strain-aging strengthening in a body-centered-cubic high-entropy alloy. <i>Materials Research Letters</i> , 2019, 7, 475-481.	4.1	29
136	Infrared imaging during low-cycle fatigue of HR-120 alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2002, 33, 1287-1292.	1.1	28
137	A multi-phase CrMnFeCoNiAl _{0.75} high-entropy alloy with high strength at intermediate temperature. <i>Intermetallics</i> , 2020, 120, 106744.	1.8	28
138	A combined drop/suction-casting machine for the manufacture of bulk-metallic-glass materials. <i>Review of Scientific Instruments</i> , 2006, 77, 033902.	0.6	27
139	Stress-life fatigue behavior and fracture-surface morphology of a Cu-based bulk-metallic glass. <i>Journal of Materials Research</i> , 2007, 22, 374-381.	1.2	27
140	High-temperature materials for structural applications: New perspectives on high-entropy alloys, bulk metallic glasses, and nanomaterials. <i>MRS Bulletin</i> , 2019, 44, 847-853.	1.7	27
141	Effects of transient thermal shock on the microstructures and corrosion properties of a reduced activation high-entropy alloy. <i>Journal of Alloys and Compounds</i> , 2022, 918, 165762.	2.8	27
142	Heterogeneous lattice strain strengthening in severely distorted crystalline solids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	27
143	Temperature evolution and life prediction in fatigue of superalloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004, 35, 839-848.	1.1	26
144	Complexity analysis of serrated flows in a bulk metallic glass under constrained and unconstrained conditions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 771, 138585.	2.6	26

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145	Mechanical and Magnetic Properties of the High-Entropy Alloys for Combinatorial Approaches. Crystals, 2020, 10, 200.	1.0	26
146	Phase prediction and effect of intrinsic residual strain on phase stability in high-entropy alloys with machine learning. Journal of Alloys and Compounds, 2022, 921, 166149.	2.8	26
147	Mechanical behavior of a Zr-based bulk metallic glass and its composite at cryogenic temperatures. Journal of Materials Research, 2007, 22, 445-452.	1.2	25
148	High-temperature tensile-hold crack-growth behavior of HASTELLOY® X alloy compared to HAYNES® 188 and HAYNES® 230® alloys. Mechanics of Time-Dependent Materials, 2008, 12, 31-44.	2.3	25
149	Quasi-static and dynamic deformation behaviors of in situ Zr-based bulk-metallic-glass-matrix composites. Journal of Materials Research, 2010, 25, 2264-2270.	1.2	25
150	Diffusion Barrier Performance of AlCrTaTiZr/AlCrTaTiZr-N High-Entropy Alloy Films for Cu/Si Connect System. Entropy, 2020, 22, 234.	1.1	25
151	Investigation of phase-transformation path in TiZrHf(VNbTa) _x refractory high-entropy alloys and its effect on mechanical property. Journal of Alloys and Compounds, 2021, 886, 161187.	2.8	25
152	Revealing the relationship between microstructures, textures, and mechanical behaviors of cold-rolled Al _{0.1} CoCrFeNi high-entropy alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 804, 140752.	2.6	24
153	Structure prediction in high-entropy alloys with machine learning. Applied Physics Letters, 2021, 118, .	1.5	24
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