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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

77 papers	2,680 citations	25 h-index	51 g-index
81 ext. papers	3,979 ext. citations	9 avg, IF	5.48 L-index

#	Paper	IF	Citations
77	Ductile CoCrFeNiMox high entropy alloys strengthened by hard intermetallic phases. <i>Acta Materialia</i> , 2016 , 116, 332-342	8.4	432
76	Heterogeneous precipitation behavior and stacking-fault-mediated deformation in a CoCrNi-based medium-entropy alloy. <i>Acta Materialia</i> , 2017 , 138, 72-82	8.4	286
75	Entropy-driven phase stability and slow diffusion kinetics in an Al _{0.5} CoCrCuFeNi high entropy alloy. <i>Intermetallics</i> , 2012 , 31, 165-172	3.5	191
74	Synergistic effects of Cu and Ni on nanoscale precipitation and mechanical properties of high-strength steels. <i>Acta Materialia</i> , 2013 , 61, 5996-6005	8.4	134
73	Precipitation mechanism and mechanical properties of an ultra-high strength steel hardened by nanoscale NiAl and Cu particles. <i>Acta Materialia</i> , 2015 , 97, 58-67	8.4	126
72	Co-precipitation of nanoscale particles in steels with ultra-high strength for a new era. <i>Materials Today</i> , 2017 , 20, 142-154	21.8	103
71	Phase stability and tensile properties of Co-free Al _{0.5} CrCuFeNi ₂ high-entropy alloys. <i>Journal of Alloys and Compounds</i> , 2014 , 584, 530-537	5.7	85
70	Nanoparticles-strengthened high-entropy alloys for cryogenic applications showing an exceptional strength-ductility synergy. <i>Scripta Materialia</i> , 2019 , 164, 30-35	5.6	81
69	Effects of Mn partitioning on nanoscale precipitation and mechanical properties of ferritic steels strengthened by NiAl nanoparticles. <i>Acta Materialia</i> , 2015 , 84, 283-291	8.4	72
68	A Novel Multinary Intermetallic as an Active Electrocatalyst for Hydrogen Evolution. <i>Advanced Materials</i> , 2020 , 32, e2000385	24	72
67	Ultrahigh-strength and ductile superlattice alloys with nanoscale disordered interfaces. <i>Science</i> , 2020 , 369, 427-432	33.3	72
66	High-strength steels hardened mainly by nanoscale NiAl precipitates. <i>Scripta Materialia</i> , 2014 , 87, 45-48	5.6	66
65	Ultrahigh strength and ductility in newly developed materials with coherent nanolamellar architectures. <i>Nature Communications</i> , 2020 , 11, 6240	17.4	59
64	Attractive In Situ Self-Reconstructed Hierarchical Gradient Structure of Metallic Glass for High Efficiency and Remarkable Stability in Catalytic Performance. <i>Advanced Functional Materials</i> , 2019 , 29, 1807857	15.6	47
63	Control of nanoscale precipitation and elimination of intermediate-temperature embrittlement in multicomponent high-entropy alloys. <i>Acta Materialia</i> , 2020 , 189, 47-59	8.4	47
62	Improved ductility and oxidation resistance of cast Ti ₃ Al ₂ V alloys by microalloying. <i>Journal of Alloys and Compounds</i> , 2014 , 602, 235-240	5.7	47
61	Strategies for improving ductility of ordered intermetallics. <i>Progress in Natural Science: Materials International</i> , 2016 , 26, 1-12	3.6	45

60	Hierarchical nanostructured aluminum alloy with ultrahigh strength and large plasticity. <i>Nature Communications</i> , 2019 , 10, 5099	17.4	45
59	High-Entropy Alloy (HEA)-Coated Nanolattice Structures and Their Mechanical Properties. <i>Advanced Engineering Materials</i> , 2018 , 20, 1700625	3.5	40
58	Precipitate transformation from NiAl-type to Ni ₂ AlMn-type and its influence on the mechanical properties of high-strength steels. <i>Acta Materialia</i> , 2016 , 110, 31-43	8.4	35
57	Group precipitation and age hardening of nanostructured Fe-based alloys with ultra-high strengths. <i>Scientific Reports</i> , 2016 , 6, 21364	4.9	32
56	Hardening mechanisms and impact toughening of a high-strength steel containing low Ni and Cu additions. <i>Acta Materialia</i> , 2019 , 172, 150-160	8.4	30
55	Exceptional nanostructure stability and its origins in the CoCrNi-based precipitation-strengthened medium-entropy alloy. <i>Materials Research Letters</i> , 2019 , 7, 152-158	7.4	29
54	High performance Fe-based nanocrystalline alloys with excellent thermal stability. <i>Journal of Alloys and Compounds</i> , 2019 , 776, 606-613	5.7	27
53	Mechanical properties and deformation mechanisms of a novel austenite-martensite dual phase steel. <i>International Journal of Plasticity</i> , 2020 , 128, 102677	7.6	26
52	Microstructures and mechanical properties of CoCrFeMnNiV high entropy alloy films. <i>Journal of Alloys and Compounds</i> , 2020 , 820, 153388	5.7	25
51	Effects of welding and post-weld heat treatments on nanoscale precipitation and mechanical properties of an ultra-high strength steel hardened by NiAl and Cu nanoparticles. <i>Acta Materialia</i> , 2016 , 120, 216-227	8.4	25
50	Accelerated design of novel W-free high-strength Co-base superalloys with extremely wide σ region by machine learning and CALPHAD methods. <i>Acta Materialia</i> , 2020 , 186, 425-433	8.4	23
49	Atom-probe study of Cu and NiAl nanoscale precipitation and interfacial segregation in a nanoparticle-strengthened steel. <i>Materials Research Letters</i> , 2017 , 5, 562-568	7.4	22
48	Effects of boron on the fracture behavior and ductility of cast Ti ₆ Al ₄ V alloys. <i>Scripta Materialia</i> , 2015 , 100, 90-93	5.6	21
47	Three-dimensional visualization and quantitative characterization of grains in polycrystalline iron. <i>Materials Characterization</i> , 2014 , 91, 65-75	3.9	19
46	In situ design of advanced titanium alloy with concentration modulations by additive manufacturing. <i>Science</i> , 2021 , 374, 478-482	33.3	18
45	Effects of boron additions and solutionizing treatments on microstructures and ductility of forged Ti ₆ Al ₄ V alloys. <i>Journal of Alloys and Compounds</i> , 2015 , 624, 170-178	5.7	17
44	Achieving exceptional wear resistance in a compositionally complex alloy via tuning the interfacial structure and chemistry. <i>Acta Materialia</i> , 2020 , 188, 697-710	8.4	16
43	Density fluctuations with fractal order in metallic glasses detected by synchrotron X-ray nano-computed tomography. <i>Acta Materialia</i> , 2018 , 155, 69-79	8.4	16

42	Refractory alloying additions on the thermal stability and mechanical properties of high-entropy alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 797, 140020	5.3	16
41	Synergistic effects of Al and Ti on the oxidation behaviour and mechanical properties of L12-strengthened FeCoCrNi high-entropy alloys. <i>Corrosion Science</i> , 2021 , 184, 109365	6.8	15
40	Mechanisms for suppressing discontinuous precipitation and improving mechanical properties of NiAl-strengthened steels through nanoscale Cu partitioning. <i>Acta Materialia</i> , 2021 , 205, 116561	8.4	15
39	A novel ferritic steel family hardened by intermetallic compound G-phase. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 745, 390-399	5.3	13
38	Optimal approach of three-dimensional microstructure reconstructions and visualizations. <i>Materials Express</i> , 2013 , 3, 109-118	1.3	12
37	A novel L12-strengthened multicomponent Co-rich high-entropy alloy with both high σ_{solvus} temperature and superior high-temperature strength. <i>Scripta Materialia</i> , 2021 , 199, 113826	5.6	12
36	Heterogenous columnar-grained high-entropy alloys produce exceptional resistance to intermediate-temperature intergranular embrittlement. <i>Scripta Materialia</i> , 2021 , 194, 113622	5.6	12
35	Atomic-scale heterogeneity in large-plasticity Cu-doped metallic glasses. <i>Journal of Alloys and Compounds</i> , 2019 , 798, 517-522	5.7	11
34	Topological correlations of three-dimensional grains. <i>Applied Physics Letters</i> , 2012 , 101, 041910	3.4	11
33	Thermal stability and high-temperature mechanical performance of nanostructured W ₄₀ Cr ₂₀ CrC composite. <i>Composites Part B: Engineering</i> , 2021 , 208, 108600	10	11
32	Synergistic alloying effects on nanoscale precipitation and mechanical properties of ultrahigh-strength steels strengthened by Ni ₃ Ti, Mo-enriched, and Cr-rich co-precipitates. <i>Acta Materialia</i> , 2021 , 209, 116788	8.4	11
31	Breaking the strength-ductility paradox in advanced nanostructured Fe-based alloys through combined Cu and Mn additions. <i>Scripta Materialia</i> , 2020 , 186, 213-218	5.6	10
30	Topology-dependent description of grain growth. <i>Europhysics Letters</i> , 2011 , 96, 38003	1.6	10
29	Effect of Mo:W ratio on segregation behavior and creep strength of nickel-based single crystal superalloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019 , 744, 481-489	5.3	10
28	Compositional and microstructural optimization and mechanical-property enhancement of cast Ti alloys based on Ti-6Al-4V alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 704, 91-101	5.3	9
27	Precipitation kinetics and mechanical properties of nanostructured steels with Mo additions. <i>Materials Research Letters</i> , 2020 , 8, 187-194	7.4	8
26	Anomalous precipitate-size-dependent ductility in multicomponent high-entropy alloys with dense nanoscale precipitates. <i>Acta Materialia</i> , 2022 , 223, 117480	8.4	8
25	Precipitation behavior in G-phase strengthened ferritic stainless steels. <i>Acta Materialia</i> , 2021 , 205, 116542	4.4	8

24	Control of discontinuous and continuous precipitation of α -strengthened high-entropy alloys through nanoscale Nb segregation and partitioning. <i>Journal of Alloys and Compounds</i> , 2020 , 832, 154903	5.7	7
23	Design of ultrastrong but ductile medium-entropy alloy with controlled precipitations and heterogeneous grain structures. <i>Applied Materials Today</i> , 2021 , 23, 101037	6.6	5
22	A highly distorted ultraelastic chemically complex Elinvar alloy.. <i>Nature</i> , 2022 , 602, 251-257	50.4	4
21	Rational design of chemically complex metallic glasses by hybrid modeling guided machine learning. <i>Npj Computational Materials</i> , 2021 , 7,	10.9	4
20	Multicomponent Ni-rich high-entropy alloy toughened with irregular-shaped precipitates and serrated grain boundaries. <i>Scripta Materialia</i> , 2021 , 204, 114066	5.6	4
19	Cu-assisted austenite reversion and enhanced TRIP effect in maraging stainless steels. <i>Journal of Materials Science and Technology</i> , 2022 , 104, 52-58	9.1	4
18	Topological correlations of grain faces in polycrystal with experimental verification. <i>Europhysics Letters</i> , 2013 , 104, 56006	1.6	2
17	A note on grain topology-size relationship of three-dimensional polycrystalline microstructures. <i>Europhysics Letters</i> , 2012 , 99, 28001	1.6	2
16	Water Splitting: A Novel Multinary Intermetallic as an Active Electrocatalyst for Hydrogen Evolution (Adv. Mater. 21/2020). <i>Advanced Materials</i> , 2020 , 32, 2070166	24	2
15	Copper-Rich Nanoclusters: Ferritic Steels Strengthened	2016, 875-886	2
14	A new α -Ti-alloy with refined microstructures and enhanced mechanical properties in the as-cast state. <i>Scripta Materialia</i> , 2022 , 207, 114260	5.6	2
13	Synergy of strengthening and toughening of a Cu-rich precipitate-strengthened steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 832, 142487	5.3	1
12	Enhanced strength-ductility synergy via novel bifunctional nano-precipitates in a high-entropy alloy. <i>International Journal of Plasticity</i> , 2022 , 153, 103235	7.6	1
11	Ultrastrong and ductile transient liquid phase (TLP) bonding joints reinforced by ordered multi-precipitates. <i>Composites Part B: Engineering</i> , 2022 , 231, 109568	10	1
10	Wear-resistance enhancement of nanostructured W-Cu-Cr composites. <i>International Journal of Refractory Metals and Hard Materials</i> , 2021 , 101, 105673	4.1	1
9	Chemically complex intermetallic alloys: A new frontier for innovative structural materials. <i>Materials Today</i> , 2022 , 52, 161-174	21.8	1
8	Intermediate temperature embrittlement in a precipitation-hardened high-entropy alloy: The role of heterogeneous strain distribution and environmentally assisted intergranular damage. <i>Materials Today Physics</i> , 2022 , 24, 100653	8	1
7	High-entropy induced a glass-to-glass transition in a metallic glass.. <i>Nature Communications</i> , 2022 , 13, 2183	17.4	1

6	Remarkable cryogenic strengthening and toughening in nano-coherent CoCrFeNiTi _{0.2} high-entropy alloys via energetically-tuning polymorphous precipitates. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022 , 143111	5.3	o
5	Temperature-dependent microstructural evolutions and deformation mechanisms of (Ni ₂ Co ₂ FeCr) ₉₂ Al ₄ Nb ₄ high-entropy alloys. <i>Journal of Alloys and Compounds</i> , 2022 , 165597	5.7	o
4	Metallic Glass Catalysts: Attractive In Situ Self-Reconstructed Hierarchical Gradient Structure of Metallic Glass for High Efficiency and Remarkable Stability in Catalytic Performance (Adv. Funct. Mater. 19/2019). <i>Advanced Functional Materials</i> , 2019 , 29, 1970131	15.6	
3	Atomistic study of Al partitioning and its influence on nanoscale precipitation of Cu-rich nanocluster-strengthened steels. <i>Materials Characterization</i> , 2022 , 184, 111687	3.9	
2	Phase Stability and Precipitation in L12-Strengthened CoCrNi Medium-Entropy Alloys at Intermediate Temperatures. <i>Journal of Phase Equilibria and Diffusion</i> , 2021 , 42, 781	1	
1	Single-element amorphous palladium nanoparticles formed via phase separation. <i>Nano Research</i> , 1	10	