Feng He

List of Publications by Year
in descending order

54 papers	2,539 citations	257450 24 h-index	197818 49 g-index
55 all docs	55 docs citations	55 times ranked	1332 citing authors

#	Article	IF	Citations
1	Designing eutectic high entropy alloys of CoCrFeNiNb x. Journal of Alloys and Compounds, 2016, 656, 284-289.	5.5	340
2	Phase separation of metastable CoCrFeNi high entropy alloy at intermediate temperatures. Scripta Materialia, 2017, 126, 15-19.	5.2	212
3	Design of D022 superlattice with superior strengthening effect in high entropy alloys. Acta Materialia, 2019, 167, 275-286.	7.9	172
4	Uncovering the eutectics design by machine learning in the Alâ€“Coâ€“Crâ€“Feâ€“Ni high entropy system. Acta Materialia, 2020, 182, 278-286.	7.9	143
5	Novel Co-rich high entropy alloys with superior tensile properties. Materials Research Letters, 2019, 7, 82-88.	8.7	139
6	Effects of temperature and microstructure on the triblogical properties of CoCrFeNiNbx eutectic high entropy alloys. Journal of Alloys and Compounds, 2019, 775, 1376-1385.	5.5	129
7	Stability of lamellar structures in CoCrFeNiNbx eutectic high entropy alloys at elevated temperatures. Materials and Design, 2016, 104, 259-264.	7.0	128
8	Strengthening the CoCrFeNiNb0.25 high entropy alloy by FCC precipitate. Journal of Alloys and Compounds, 2016, 667, 53-57.	5.5	106
9	Alloy design, micromechanical and macromechanical properties of CoCrFeNiTax eutectic high entropy alloys. Journal of Alloys and Compounds, 2018, 735, 2653-2662.	5.5	93
10	Metastability in high-entropy alloys: A review. Journal of Materials Research, 2018, 33, 2924-2937.	2.6	85
11	Solid solution island of the Co-Cr-Fe-Ni high entropy alloy system. Scripta Materialia, 2017, 131, 42-46.	5.2	81
12	Synergistic effect of Ti and Al on L12-phase design in CoCrFeNi-based high entropy alloys. Intermetallics, 2019, 110, 106476.	3.9	76
13	Composition evolution of gamma prime nanoparticles in the Ti-doped CoFeCrNi high entropy alloy. Scripta Materialia, 2018, 148, 42-46.	5.2	54
14	Strain partitioning enables excellent tensile ductility in precipitated heterogeneous high-entropy alloys with gigapascal yield strength. International Journal of Plasticity, 2021, 144, 103022.	8.8	51
15	The intrinsic mechanism of corrosion resistance for FCC high entropy alloys. Science China Technological Sciences, 2018, 61, 189-196.	4.0	48
16	Tailoring nanoprecipitates for ultra-strong high-entropy alloys via machine learning and prestrain aging. Journal of Materials Science and Technology, 2021, 69, 156-167.	10.7	48
17	Solid solubility, precipitates, and stacking fault energy of micro-alloyed CoCrFeNi high entropy alloys. Journal of Alloys and Compounds, 2018, 769, 490-502.	5.5	46
18	Abnormal Î³â€³ - Îµ phase transformation in the CoCrFeNiNb0.25 high entropy alloy. Scripta Materialia, 2018, 146, 281-285.	5.2	43

#	Article	IF	Citations
19	Tuning the defects in face centered cubic high entropy alloy via temperature-dependent stacking fault energy. Scripta Materialia, 2018, 155, 134-138.	5.2	41
20	Quantitative determination of the lattice constant in high entropy alloys. Scripta Materialia, 2019, 162, 468-471.	5.2	40
21	Effect of silicon addition on the microstructures, mechanical properties and helium irradiation resistance of NiCoCr-based medium-entropy alloys. Journal of Alloys and Compounds, 2020, 844, 156162.	5.5	30
22	The phase stability of Ni2CrFeMox multi-principal-component alloys with medium configurational entropy. Materials and Design, 2015, 85, 1-6.	7.0	29
23	Kinetic ways of tailoring phases in high entropy alloys. Scientific Reports, 2016, 6, 34628.	3.3	29
24	Grouping strategy in eutectic multi-principal-component alloys. Materials Chemistry and Physics, 2019, 221, 138-143.	4.0	27
25	Revealing the Selection of Ïƒ and Î¼ Phases in CoCrFeNiMox High Entropy Alloys by CALPHAD. Journal of Phase Equilibria and Diffusion, 2018, 39, 446-453.	1.4	25
26	Effect of Ta addition on solidification characteristics of CoCrFeNiTax eutectic high entropy alloys. Intermetallics, 2020, 120, 106769.	3.9	24
27	Composition-dependent slip planarity in mechanically-stable face centered cubic complex concentrated alloys and its mechanical effects. Acta Materialia, 2021, 220, 117314.	7.9	24
28	High Entropy Alloys: From Bulk Metallic Materials to Nanoparticles. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 4986-4990.	2.2	23
29	Anomalous effect of lattice misfit on the coarsening behavior of multicomponent L12 phase. Scripta Materialia, 2020, 183, 111-116.	5.2	22
30	Elemental partitioning as a route to design precipitation-hardened high entropy alloys. Journal of Materials Science and Technology, 2021, 72, 52-60.	10.7	20
31	Rapid alloy design from superior eutectic high-entropy alloys. Scripta Materialia, 2022, 219, 114875.	5.2	20
32	Origins of the mechanical property heterogeneity in a hybrid additive manufactured Hastelloy X. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 823, 141716.	5.6	19
33	Design Fe-based Eutectic Medium-Entropy Alloys Fe2NiCrNbx. Acta Metallurgica Sinica (English) Tj ETQq1 1 0.784314 rgBT /Overlock	2.9	17
34	Deformation faulting and dislocation-cell refinement in a selective laser melted 316L stainless steel. International Journal of Plasticity, 2022, 156, 103346.	8.8	17
35	A precipitation-strengthened high-entropy alloy for additive manufacturing. Additive Manufacturing, 2020, 35, 101410.	3.0	15
36	The dual effect of grain size on the strain hardening behaviors of Ni-Co-Cr-Fe high entropy alloys. Journal of Materials Science and Technology, 2022, 131, 177-184.	10.7	15

#	Article	IF	Citations
37	Effect of Re and Ru on the phase stability and coarsening kinetics of L12 phase in a Ni29Co27Fe27Cr3Al7Ti7 high entropy alloy. Journal of Alloys and Compounds, 2021, 866, 158904.	5.5	14
38	Concurrent Recrystallization and Precipitation for Combination of Superior Precipitation and Grain Boundary Hardening in Co37Cr20Ni37Ti3Al3 High-Entropy Alloy. Metals and Materials International, 2022, 28, 2863-2873.	3.4	12
39	Superior Slurry Erosion Behavior of a Casting NiCoCrFeNb0.45 Eutectic High Entropy Alloy. Acta Metallurgica Sinica (English Letters), 2020, 33, 1111-1116.	2.9	11
40	Elemental Phase Partitioning in the Î³-Î³â€³ Ni2CoFeCrNb0.15 High Entropy Alloy. Entropy, 2018, 20, 910.	2.2	10
41	Heterogeneous microstructure of the bonding zone and its dependence on preheating in hybrid manufactured Ti-6Al-4V. Materials Research Letters, 2021, 9, 422-428.	8.7	10
42	Tailoring microstructures of CoCrFeNiNb0.25 hypoeutectic high-entropy alloy by hot deformation. Rare Metals, 2022, 41, 2028-2037.	7.1	9
43	Endless recrystallization of high-entropy alloys at high temperature. Journal of Materials Science and Technology, 2022, 128, 71-81.	10.7	9
44	Effects of surfactant on capillary evaporation process with thick films. International Journal of Heat and Mass Transfer, 2015, 88, 406-410.	4.8	8
45	Effects of temperature on helium cavity evolution in single-phase concentrated solid-solution alloys. Journal of Nuclear Materials, 2021, 557, 153261.	2.7	8
46	Distinct Recrystallization Kinetics in Niâ€“Coâ€“Crâ€“Fe-Based Single-Phase High-Entropy Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 3799-3810.	2.2	5
47	Non-monotonous effect of pre-strain on the precipitates and strengthening mechanisms of high-entropy alloys. Journal of Alloys and Compounds, 2022, 906, 164338.	5.5	5
48	Temperature-dependent helium induced microstructural evolution in equiatomic NiCo and NiFe concentrated solid solution alloys. Journal of Nuclear Materials, 2021, 545, 152715.	2.7	4
49	Investigation on the capillary evaporation process based on the existence of liquid film. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 246401.	0.5	1
50	Design of D0 ₂₂ Superlattice with Superior Strengthening Effect in High Entropy Alloys. SSRN Electronic Journal, 0, , .	0.4	0
51	Uncovering the Eutectics Design by Machine Learning in the Al-Co-Cr-Fe-Ni High Entropy System. SSRN Electronic Journal, 0, , .	0.4	0
52	Anomalous Effect of Lattice Misfit on the Coarsening Behavior of Multicomponent L12 Phase. SSRN Electronic Journal, 0, , .	0.4	0
53	Elemental Partitioning as a Route to Design Precipitation-Hardened High Entropy Alloys. SSRN Electronic Journal, 0, , .	0.4	0
54	Effect of Ti/Al Ratio on the Elemental Partitioning in the Face-Centered Cubic-Based Î³-Î³â€² Dual-Phase High Entropy Alloy Studied by Atom Probe Tomography. Frontiers in Materials, 2022, 9, .	2.4	0