Shuo Huang

List of Publications by Year in Descending Order

45 papers	1,058 citations	15 h-index	32 g-index
47 ext. papers	1,320 ext. citations	4.7 avg, IF	4.61 L-index

#	Paper	IF	Citations
45	Enhanced ion transport behaviors in composite polymer electrolyte: the case of a looser chain folding structure. *Journal of Materials Chemistry A*, **2022**, 10, 3226-3232	13	1
44	High Entropy Alloys: Elastic Parameters and Trends **2022**, 427-434		0
43	Magnetocaloric properties of melt-spun MnFe-rich high-entropy alloy. *Applied Physics Letters*, **2021**, 119, 141909	3.4	2
42	Data-driven design of a new class of rare-earth free permanent magnets. *Acta Materialia*, **2021**, 212, 116913	8.4	1
41	Magnetic transformation of Mn from anti-ferromagnetism to ferromagnetism in FeCoNiZMn (Z = Si, Al, Sn, Ge) high entropy alloys. *Journal of Materials Science and Technology*, **2021**, 68, 124-131	9.1	8
40	Mn Cr0.3Fe0.5Co0.2Ni0.5Al0.3 high entropy alloys for magnetocaloric refrigeration near room temperature. *Journal of Materials Science and Technology*, **2021**, 79, 15-20	9.1	14
39	Vibrational entropy-enhanced magnetocaloric effect in Mn-rich high-entropy alloys. *Applied Physics Letters*, **2021**, 119, 084102	3.4	3
38	Preparation of Surface Modified Ceria Nanoparticles as Abrasives for the Application of Chemical Mechanical Polishing (CMP). *ECS Journal of Solid State Science and Technology*, **2020**, 9, 024015	2	2
37	RE (La, Nd and Yb) doped CeO2 abrasive particles for chemical mechanical polishing of dielectric materials: Experimental and computational analysis. *Applied Surface Science*, **2020**, 506, 144668	6.7	15
36	Chemical ordering controlled thermo-elasticity of AlTiVCr1-Nb high-entropy alloys. *Acta Materialia*, **2020**, 199, 53-62	8.4	5
35	Thermo-elastic properties of bcc Mn-rich high-entropy alloy. *Applied Physics Letters*, **2020**, 117, 164101	3.4	6
34	Pressure-induced magnetovolume effect in CoCrFeAl high-entropy alloy. *Communications Physics*, **2019**, 2,	5.4	8
33	The chemical ordering and elasticity in FeCoNiAl1−xTix high-entropy alloys. *Scripta Materialia*, **2019**, 168, 5-9	5.6	10
32	Plastic deformation transition in FeCrCoNiAlx high-entropy alloys. *Materials Research Letters*, **2019**, 7, 439-445	7.4	9
31	Evolution of microstructure and hardness in Hf25Nb25Ti25Zr25 high-entropy alloy during high-pressure torsion. *Journal of Alloys and Compounds*, **2019**, 788, 318-328	5.7	22
30	The effect of cooling rate on the microstructure and mechanical properties of NiCoFeCrGa high-entropy alloy. *Journal of Materials Science*, **2019**, 54, 5074-5082	4.3	4
29	Mussel Inspired Modification for Aluminum Oxide/Silicone Elastomer Composites with Largely Improved Thermal Conductivity and Low Dielectric Constant. *Industrial & Engineering Chemistry Research*, **2018**, 57, 3255-3262	3.9	57

28	Critical stress for twinning nucleation in CrCoNi-based medium and high entropy alloys. *Acta Materialia*, **2018**, 149, 388-396	8.4	95
27	Evolution of the phase structure after different heat treatments in NiCoFeCrGa high entropy alloy. *Journal of Alloys and Compounds*, **2018**, 743, 234-239	5.7	4
26	Mapping the magnetic transition temperatures for medium- and high-entropy alloys. *Intermetallics*, **2018**, 95, 80-84	3.5	50
25	Mechanical performance of FeCrCoMnAl high-entropy alloys from first-principle. *Materials Chemistry and Physics*, **2018**, 210, 37-42	4.4	10
24	Twinning in metastable high-entropy alloys. *Nature Communications*, **2018**, 9, 2381	17.4	108
23	Elasticity of high-entropy alloys from ab initio theory. *Journal of Materials Research*, **2018**, 33, 2938-2953	2.5	24
22	Phase-transition assisted mechanical behavior of TiZrHfTa high-entropy alloys. *Scientific Reports*, **2018**, 8, 12576	4.9	3
21	Strengthening Induced by MagnetoChemical Transition in Al-Doped Fe-Cr-Co-Ni High-Entropy Alloys. *Physical Review Applied*, **2018**, 10,	4.3	7
20	Enhancement of Dielectric Performance of Polymer Composites via Constructing BaTiO-Poly(dopamine)-Ag Nanoparticles through Mussel-Inspired Surface Functionalization. *ACS Omega*, **2018**, 3, 14087-14096	3.9	18
19	Thermal expansion in FeCrCoNiGa high-entropy alloy from theory and experiment. *Applied Physics Letters*, **2017**, 110, 241902	3.4	16
18	Thermal Expansion, Elastic and Magnetic Properties of FeCoNiCu-Based High-Entropy Alloys Using First-Principle Theory. *Jom*, **2017**, 69, 2107-2112	2.1	23
17	Effects of the sp element additions on the microstructure and mechanical properties of NiCoFeCr based high entropy alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 669, 14-19	5.3	18
16	Mechanism of magnetic transition in FeCrCoNi-based high entropy alloys. *Materials and Design*, **2016**, 103, 71-74	8.1	76
15	Temperature dependent stacking fault energy of FeCrCoNiMn high entropy alloy. *Scripta Materialia* , **2015**, 108, 44-47	5.6	309
14	Phase stability and magnetic behavior of FeCrCoNiGe high-entropy alloy. *Applied Physics Letters*, **2015**, 107, 251906	3.4	32
13	Site preference and alloying effect on elastic properties of ternary B2□RuAl-based alloys. *Intermetallics*, **2014**, 51, 24-29	3.5	20
12	Alloying-related trends in thermal properties of ternary TiN-based nitrides. *International Journal of Modern Physics B*, **2014**, 28, 1450087	1.1	3
11	Order□disorder effects on the elastic properties of CuMPt6 (M=Cr and Co) compounds. *Solid State Communications*, **2014**, 184, 52-55	1.6	

10	A theoretical study of the elastic and thermal properties of ScRu compound under pressure. *Physica Scripta*, **2014**, 89, 065702	2.6	12
9	Structural and mechanical properties of Fe□Al compounds: An atomistic study by EAM simulation. *Intermetallics*, **2014**, 52, 86-91	3.5	32
8	Atomistic simulation of site preference, Curie temperature and lattice vibration of ZrT12□Mx (T=Fe, Co; M=Al, Ga). *Physica B: Condensed Matter*, **2013**, 427, 110-117	2.8	
7	Atomistic simulation for ordered Ho3Fe29□Crx and disordered Ho2Fe17 intermetallic compounds. *Journal of Alloys and Compounds*, **2013**, 580, 522-526	5.7	1
6	The influence of 3d-metal alloy additions on the elastic and thermodynamic properties of CuPd3. *Chinese Physics B*, **2013**, 22, 083401	1.2	2
5	Atomistic modeling of Co□Al compounds. *Journal of Materials Research*, **2013**, 28, 2720-2727	2.5	3
4	ELASTIC AND VIBRATIONAL PROPERTIES OF ORDERED AND DISORDERED CuMnPt6. *Modern Physics Letters B*, **2013**, 27, 1350195	1.6	1
3	EFFECTS ON MECHANICAL PROPERTIES OF REFRACTORY METAL DOPED Ti3Al ALLOY. *International Journal of Modern Physics B*, **2013**, 27, 1350147	1.1	5
2	Chen's lattice inversion embedded-atom method for Ni□Al alloy. *Chinese Physics B*, **2012**, 21, 113401	1.2	12
1	Chen's Lattice Inversion Embedded-Atom Method for FCC Metal. *Advanced Materials Research*, **2011**, 320, 415-420	0.5	7