Wenchao Yang

List of Publications by Year in descending order

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53	518	14	20
papers	citations	h-index	g-index
53	53	53	359 citing authors
all docs	docs citations	times ranked	

#	Article	IF	CITATIONS
1	Characterization of Waste Amidoxime Chelating Resin and Its Reutilization Performance in Adsorption of Pb(II), Cu(II), Cd(II) and Zn(II) lons. Metals, 2022, 12, 149.	1.0	11
2	The Stability and Electronic Structure of Cu(200)/AuCu(200) Interface: An Insight from First-Principle Calculation. Materials, 2022, 15, 1506.	1.3	4
3	Morphological Evolution of TiB2 and TiAl3 in Al–Ti–B Master Alloy Using Different Ti Adding Routes. Materials, 2022, 15, 1984.	1.3	2
4	Designing highly efficient 3D porous Ni-Fe sulfide nanosheets based catalyst for the overall water splitting through component regulation. Journal of Colloid and Interface Science, 2022, 616, 422-432.	5.0	37
5	A dense gas dispersion model based on revised meteorological parameters and its performance evaluation. Atmospheric Environment, 2021, 244, 117953.	1.9	7
6	Phase-equilibria investigation of the Dy-Mo-Si ternary system at 1173ÂK (900°C). Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2021, 72, 102232.	0.7	1
7	Design and Characterization of Novel Biomedical Zr–4Cu–xNb–xSn Alloys for Hard Tissue Substitution. Arabian Journal for Science and Engineering, 2021, 46, 6075-6084.	1.7	0
8	Properties and electronic structure of Al/Mo2C interfaces: insights from first principle simulation. Philosophical Magazine, 2021, 101, 1061-1080.	0.7	2
9	Insights into the atomic scale structure, bond characteristics and wetting behavior of Cu(001)/Cu6Sn5(110) interface: A first-principles investigation. Vacuum, 2021, 187, 110103.	1.6	17
10	Effects of Yttrium Addition on the Microstructure Evolution and Electrochemical Corrosion of SN-9Zn Lead-Free Solders Alloy. Materials, 2021, 14, 2549.	1.3	2
11	Influence of vacancy on the mechanical behavior, thermodynamic properties and electronic structure of orthorhombic Ti3Sn from first-principles calculations. Vacuum, 2021, 188, 110178.	1.6	7
12	Understanding the influence of rare earth yttrium on surface characterizations of orthorhombic α-Mo2C(023) surface: A first-principle calculation approach. Surface Science, 2021, 708, 121823.	0.8	3
13	Effect of Aging Treatment on the Corrosion Resistance Properties of 7N01 Extrusion Aluminum Alloy. Materials, 2021, 14, 3615.	1.3	6
14	Interfacial reaction and mechanical properties of Sn58Bi-XCr solder joints under isothermal aging conditions. Vacuum, 2021, 194, 110559.	1.6	17
15	New Zr–25Ti–xMo alloys for dental implant application: Properties characterization and surface analysis. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 111, 104017.	1.5	9
16	Effect of Graphene Nanosheet Addition on the Wettability and Mechanical Properties of Sn-20Bi-xGNS/Cu Solder Joints. Materials, 2020, 13, 3968.	1.3	8
17	Enhanced C atom adsorption on Cu(111) substrate by doping rare earth element Y for Cu–diamond composites: A first-principles study. Journal of Alloys and Compounds, 2020, 831, 154747.	2.8	11
18	Insight into interfacial structure and bonding nature of diamond(001)/Cr3C2(001) interface. Journal of Alloys and Compounds, 2019, 770, 82-89.	2.8	12

#	Article	IF	Citations
19	Ab initio Insight Into the Structure and Properties of Zr–Si System. Physica Status Solidi (B): Basic Research, 2019, 256, 1900018.	0.7	9
20	Mechanism of FCC structure formation in NiCoFeCuMn equiatomic high-entropy alloys. Arabian Journal for Science and Engineering, 2019, 44, 6637-6644.	1.7	5
21	Phase-Equilibrium Investigation of the Al-Cr-Er Ternary System at 773ÂK (500°C). Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 2956-2970.	1.1	1
22	Influence of Nb concentration on the structure, stability, and electronic and mechanical properties of D022 Al3Ti by first-principles calculations and experiments. Journal of Physics and Chemistry of Solids, 2019, 131, 243-253.	1.9	11
23	Al–Cr–Dy system: Phase relationships and crystallography. Journal of Solid State Chemistry, 2019, 276, 47-55.	1.4	1
24	Theoretical understanding of atomic and electronic structures of the ZrC(111)/Cu(111) interface. Journal of Alloys and Compounds, 2019, 791, 431-437.	2.8	23
25	Development of CoCrFeNiVAlx High-Entropy Alloys Based on Solid Solution Strengthening. Jom, 2019, 71, 3473-3480.	0.9	12
26	Effect of Aluminum Addition on the Microstructure and Properties of Non-Eutectic Sn-20Bi Solder Alloys. Materials, 2019, 12, 1194.	1.3	12
27	Solid State Phase Equilibria of an Al–Sn–Y Ternary System. Materials, 2019, 12, 444.	1.3	1
28	Solid-State Phase Diagram of the Ho-Zr-Si Ternary System at 973ÂK (700°C). Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 966-974.	1.1	0
29	Adsorption and migration behavior of molybdenum atom on graphite (0001) surface. Applied Surface Science, 2019, 470, 1064-1070.	3.1	14
30	Atomic structure and electronic properties of Ag(111)/TiC(111) interface: Insights from first-principles simulations. Journal of Physics and Chemistry of Solids, 2019, 124, 212-220.	1.9	26
31	Insight into the structural and electronic properties of orthorhombic Cr 3 C 2 (001) surface. Journal of Physics and Chemistry of Solids, 2018, 118, 68-72.	1.9	7
32	Experimental Investigation of Phase Equilibria in the Ho-Ti-Si Ternary System at 973 K (700°C). Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 1851-1858.	1.1	3
33	Development of novel CoCu _{0.5} FeNiVTi <i>>_x</i> (<i>x</i> = 0, 0.5, 1, 1.5, 2) high-entropy alloys. Materials Science and Technology, 2018, 34, 952-960.	0.8	8
34	The different influences of the two incorporation sites of B atoms on the mechanical and thermodynamic properties of B2–ZrCu compounds: a first-principle calculation. Philosophical Magazine, 2018, 98, 517-530.	0.7	5
35	Solid State Phase Equilibria and Solid Solution of the Si-Y-Zr Ternary System at 1173ÂK. Journal of Phase Equilibria and Diffusion, 2018, 39, 401-411.	0.5	0
36	Ab initio investigation into the structure and properties of Irâ€"Zr intermetallics for high-temperature structural applications. Computational Materials Science, 2017, 131, 146-159.	1.4	23

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37	Intrinsic Properties and Structure of AB2 Laves Phase ZrW2. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 3082-3089.	1.1	2
38	Enhancement of wear and corrosion resistance of low modulus \hat{l}^2 -type Zr-20Nb-xTi (x = 0, 3) dental alloys through thermal oxidation treatment. Materials Science and Engineering C, 2017, 76, 260-268.	3.8	17
39	Distribution trends and influence of 4d transition metal elements (Ru, Rh and Pd) doping on mechanical properties and martensitic transformation temperature of B2-ZrCu phase. Journal of Physics and Chemistry of Solids, 2017, 111, 372-382.	1.9	14
40	A comparative first-principles study on electronic structures and mechanical properties of ternary intermetallic compounds Al8Cr4Y and Al8Cu4Y: Pressure and tension effects. Journal of Physics and Chemistry of Solids, 2016, 98, 298-308.	1.9	15
41	Solid-State Phase Equilibria and Intermetallic Compounds of the Si-V-Zr Ternary System. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 6569-6576.	1.1	2
42	Theoretical Prediction of Transition Metal Alloying Effects on the Lightweight TiAl Intermetallic. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 1451-1459.	1.1	12
43	Site preference of the alloying additions on mechanical and electronic properties of B2 ZrRu-based compounds. Computational Materials Science, 2016, 117, 1-6.	1.4	16
44	The electrochemical corrosion behavior of Pb–free Sn–8.5Zn–XCr solders in 3.5Âwt.% NaCl solution. Materials Chemistry and Physics, 2015, 168, 27-34.	2.0	25
45	Bonding characteristics and site occupancies of alloying elements in Zr3Al2 compound from first principles. Journal of Alloys and Compounds, 2015, 622, 960-965.	2.8	5
46	Insight into structural, mechanical, electronic and thermodynamic properties of intermetallic phases in Zr–Sn system from first-principles calculations. Journal of Physics and Chemistry of Solids, 2015, 86, 177-185.	1.9	21
47	Experimental Phase Diagram of the Al–Mo–Gd Ternary System at 773ÂK. Journal of Phase Equilibria and Diffusion, 2015, 36, 218-223.	0.5	2
48	Phase diagram of the Al–Er–Mo ternary system at 873 K. Phase Transitions, 2015, 88, 1111-1121.	0.6	5
49	Systematic analysis of the structural, elastic, and electronic properties of Ti–Cu–Me (Me=Al, Ga and) Tj ETQq	1 1 0.784 1.9	.314 rgBT /○ 2
50	Novel β-type Zr–Mo–Ti alloys for biological hard tissue replacements. Materials & Design, 2014, 53, 8-12.	5.1	43
51	Solid-State Phase Equilibria of the V-Si-Gd System at 973ÂK (700°C). Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 4194-4200.	1.1	2
52	Theoretical investigation of the Al–Cr–B orthorhombic ternary compounds. Computational and Theoretical Chemistry, 2013, 1020, 51-56.	1.1	18
53	Exploration of Rare-Earth Element Sc to Enhance Microstructure, Mechanical Properties and Corrosion Resistance of Zr–8.8Si Biomedical Alloy. Journal of Bionic Engineering, 0, , 1.	2.7	0