Xiaozhi Wu

List of Publications by Year
in descending order

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62	814	516710	580821
papers	citations	16	25
		h-index	g-index

62	62	62	846
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Phase stability, mechanical properties and electronic structure of TiAl alloying with W, Mo, Sc and Yb: First-principles study. Journal of Alloys and Compounds, 2016, 658, 689-696.	5.5	53
2	The structural stability, mechanical properties and stacking fault energy of Al3Zr precipitates in Al-Cu-Zr alloys: HRTEM observations and first-principles calculations. Journal of Alloys and Compounds, 2016, 681, 96-108.	5.5	49
3	Local charge states in hexagonal boron nitride with Stoneâ€“Wales defects. Nanoscale, 2016, 8, 8210-8219.	5.6	43
4	First principle study on the temperature dependent elastic constants, anisotropy, generalized stacking fault energy and dislocation core of NiAl and FeAl. Computational Materials Science, 2015, 103, 116-125.	3.0	40
5	Dislocation behaviors in nanotwinned diamond. Science Advances, 2018, 4, eaat8195.	10.3	40
6	New Family of Two-Dimensional Ternary Photoelectric Materials. ACS Applied Materials & Interfaces, 2019, 11, 14457-14462.	8.0	35
7	Hourglass phonons jointly protected by symmorphic and nonsymmorphic symmetries. Physical Review B, 2021, 104, .	3.2	35
8	Temperature effects on the generalized planar fault energies and twinnabilities of Al, Ni and Cu: First principles calculations. Computational Materials Science, 2014, 88, 124-130.	3.0	31
9	Two-Dimensional Li-Based Ternary Chalcogenides for Photocatalysis. Journal of Physical Chemistry Letters, 2019, 10, 6061-6066.	4.6	31
10	Energy investigations on the adhesive properties of Al/TiC interfaces: First-principles study. Physica B: Condensed Matter, 2014, 449, 269-273.	2.7	30
11	First principles study on the phase stability and mechanical properties of MoSi2 alloyed with Al, Mg and Ge. Intermetallics, 2015, 67, 26-34.	3.9	24
12	Effects of Ni vacancy, Ni antisite, Cr and Pt on the third-order elastic constants and mechanical properties of NiAl. Intermetallics, 2014, 55, 108-117.	3.9	23
13	First-principles study on the adhesive properties of Al/TiC interfaces: Revisited. Computational Materials Science, 2017, 126, 108-120.	3.0	23
14	Intrinsic quantum anomalous Hall phase induced by proximity in the van der Waals heterostructure germanene/ <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cr</mml:mi><mml:mn>2</mml:mn></mml:r Physical Review B, 2020, 101, .	3.2	23
15	Ab initio calculations on the third-order elastic constants for selected B2â€“MgRE (REÂ=ÂY, Tb, Dy, Nd) intermetallics. Intermetallics, 2010, 18, 2472-2476.	3.9	20
16	Surface Adsorption and Vacancy in Tuning the Properties of Tellurene. ACS Applied Materials & Interfaces, 2020, 12, 19110-19115.	8.0	20
17	Intrinsic Ferromagnetic Semiconductors in Two-Dimensional Alkali-Based Chromium Chalcogenides. ACS Applied Electronic Materials, 2020, 2, 3853-3858.	4.3	17
18	Thermodynamic Properties of MgSc and AlSc from First-Principles Phonon Calculations. International Journal of Thermophysics, 2012, 33, 300-310.	2.1	16

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19	Symmetry-enforced nodal cage phonons in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Th</mml:mi><mml:mn>32</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2022, 105, .	3.2	14
20	Dirac Fermions in the Boron Nitride Monolayer with a Tetragon. Journal of Physical Chemistry Letters, 2022, 13, 5508-5513.	4.6	14
21	First-principles calculations on temperature-dependent elastic constants of rare-earth intermetallic compounds: YAg and YCu. Physica B: Condensed Matter, 2011, 406, 3951-3955.	2.7	13
22	The temperature-dependent elastic properties of B2-MgRE intermetallic compounds from first principles. Physica B: Condensed Matter, 2012, 407, 96-102.	2.7	13
23	Effect of temperature on elastic constants, generalized stacking fault energy and dislocation cores in MgO and CaO. Computational Condensed Matter, 2014, 1, 38-44.	2.1	13
24	Application of parametric derivation method to the calculation of Peierls energy and Peierls stress in lattice theory. Acta Mechanica Solida Sinica, 2007, 20, 363-368.	1.9	12
25	Photoinduced Floquet mixed-Weyl semimetallic phase in a carbon allotrope. Physical Review B, 2020, 102, .	3.2	12
26	Dirac Fermions in Graphene with Stacking Fault Induced Periodic Line Defects. Journal of Physical Chemistry Letters, 2021, 12, 10874-10879.	4.6	12
27	On third-order elastic constants for ductile rare-earth intermetallic compounds: AÂfirst-principles study. Intermetallics, 2010, 18, 1653-1658.	3.9	11
28	Magnetic field induced valley-polarized quantum anomalous Hall effects in ferromagnetic van der Waals heterostructures. Physical Review B, 2022, 105, .	3.2	11
29	The discrete correction of the core structure for the langle 100angle {010} edge dislocation in bcc Fe. Journal of Physics Condensed Matter, 2008, 20, 485207.	1.8	10
30	The Phase Stability, Ductility and Hardness of MoN and NbN: First-Principles Study. Journal of Electronic Materials, 2017, 46, 1914-1925.	2.2	8
31	Electronic Properties of Armchair $$hbox {MoS}_{2}$$ MoS 2 Nanoribbons with Stacking Faults: First-Principles Calculations. Journal of Electronic Materials, 2018, 47, 5498-5508.	2.2	8
32	Interplay of Charged States and Oxygen Dissociation Induced by Vacancies in Phosphorene. Journal of Physical Chemistry C, 2019, 123, 27080-27087.	3.1	8
33	Nonlinear Elastic Properties of Superconducting Antiperovskites MNNi3 (M =Zn, Cd, Mg, Al, Ga, and In) from First Principles. Journal of Superconductivity and Novel Magnetism, 2014, 27, 1851-1859.	1.8	7
34	Third Order Elastic Constants and Debye Temperature of MgB2 Under Different Pressure: First-Principles Methods. Journal of Superconductivity and Novel Magnetism, 2015, 28, 1483-1489.	1.8	7
35	The Adhesive Properties of Coherent and Semicoherent NiAl/V Interfaces Within the Peierls-Nabarro Model. Crystals, 2016, 6, 32.	2.2	7
36	Effects of Stoneâ€“Wales Defect on the Electronic and Optical Properties of Armchair MoS2 Nanoribbon: First-Principles Calculations. Journal of Electronic Materials, 2019, 48, 3763-3776.	2.2	7

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37	Symmetry-guaranteed ideal Weyl semimetallic phase in face-centered orthogonal C6. Physical Review B, 2020, 101, .	3.2	7
38	The Elastic Constants and Anisotropy of Superconducting MgCNi3 and CdCNi3 Under Different Pressure. Journal of Superconductivity and Novel Magnetism, 2014, 27, 1187-1194.	1.8	6
39	Segregation and mechanical properties of Si, Fe and Ti on the Al/Al2.5X0.5Zr (X = Cu, Zn, Ag) coherent interfaces: First-principles calculations. Computational Materials Science, 2018, 141, 325-340.	3.0	6
40	Impact of phosphorous and sulphur substitution on Dirac cone modification and optical behaviors of monolayer graphene for nano-electronic devices. Applied Surface Science, 2019, 489, 358-371.	6.1	5
41	High Anisotropic Optoelectronics in Two Dimensional Layered PbSnX₂ (X = S/Se). Journal of Physical Chemistry Letters, 2021, 12, 10574-10580.	4.6	5
42	Peierls stress for â©110âª{001} mixed dislocation in SrTiO3 within framework of constrained path approximation. Acta Mechanica Sinica/Lixue Xuebao, 2010, 26, 425-432.	3.4	4
43	The Elastic Properties, Generalized Stacking Fault Energy and Dissociated Dislocations in MgB2 Under Different Pressure. Journal of Superconductivity and Novel Magnetism, 2013, 26, 3401-3409.	1.8	4
44	Effects of temperature and redshift on the refractive index of semiconductors. Journal of Applied Physics, 2018, 124, 035703.	2.5	4
45	The Dirac cone in two-dimensional tetragonal silicon carbides: a ring coupling mechanism. Nanoscale, 2021, 13, 18267-18272.	5.6	4
46	On Core Structure Properties and Peierls Stress of Dissociated Superdislocations in Aluminides: NiAl and FeAl. Acta Mechanica Solida Sinica, 2010, 23, 213-219.	1.9	3
47	On the core width and Peierls stress of bubble rafts dislocations within the framework of modified Peierls-Nabarro model. Open Physics, 2011, 9, .	1.7	3
48	Temperature-Dependent Generalized Planar Fault Energy and Twinnability of Mg Microalloyed with Er, Ho, Dy, Tb, and Gd: First-Principles Study. Advances in Materials Science and Engineering, 2016, 2016, 1-9.	1.8	3
49	New Family of Two-Dimensional Group-(II₃â€“V₂) Photoelectric Materials. Journal of Physical Chemistry C, 2019, 123, 16851-16856.	3.1	3
50	The transformation pathways for vitual long period stacking-ordered Mg: First-principles study. Computational Materials Science, 2016, 114, 1-12.	3.0	2
51	Surface Effects on the Properties of Screw Dislocation in Nanofilms. Advances in Materials Science and Engineering, 2017, 2017, 1-9.	1.8	2
52	Electronic and Optical Properties of Zigzag BN/AlN Nanoribbons with Misfit Dislocations: First-Principles Calculations. Journal of Electronic Materials, 2020, 49, 4100-4110.	2.2	2
53	Spin-polarized topological phases in a ferromagnetic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> bilayer tuned by electric and magnetic fields. Physical Review B, 2022, 105, .	2.2	2
54	First principle study on generalized stacking fault energy and surface energy of B2-AgRE intermetallics. Physica B: Condensed Matter, 2012, 407, 4117-4122.	2.7	1

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55	Effect of Pressure on Elastic Constants, Generalized Stacking Fault Energy, and Dislocation Properties in Antiperovskite-Type Ni-Rich Nitrides ZnNNi3 and CdNNi3. Journal of Superconductivity and Novel Magnetism, 2014, 27, 2607-2615.	1.8	1
56	The Core Structure and Peierls Stress of âŒ© 11 2 Â¯ 0 âŒª $langle 11overline {2}0angle $ Dislocations in MgB2 with Mg and B Vacancies. Journal of Superconductivity and Novel Magnetism, 2015, 28, 1743-1748.	1.8	1
57	High temperature and pressure effects on the elastic properties of B2 intermetallics AgRE. Open Physics, 2015, 13, .	1.7	1
58	Modified Peierlsâ€“Nabarro dislocation equation for $$ leftlangle {ext{110}} ightangle {{ 1ar{1}0} } $$ 110 { 1 1 Â¯ 0 } dissociated superdislocations in perovskite CaSiO3. Physics and Chemistry of Minerals, 2016, 43, 563-570.	0.8	1
59	Structural and electronic properties of 90Â° dislocations in silicon nanorods: A first-principles calculation. Computational Materials Science, 2018, 149, 243-249.	3.0	1
60	(DSF)_n-graphene: a carbon semimetal with double stacking faults. Journal of Materials Chemistry C, 2022, 10, 2103-2108.	5.5	1
61	High Pressure Effects on the Properties of âŒ©110âŒª {001} Dislocation in Superconducting ZnCNi3 and MgCNi3 Determined from First Principles Calculations Combined with an Improved Peierls-Nabarro Equation. Journal of Superconductivity and Novel Magnetism, 2015, 28, 2281-2291.	1.8	0
62	Effects of Multiple Stacking Faults on the Electronic and Optical Properties of Armchair MoS $$_{2}$$ 2 Nanoribbons: First-Principles Calculations. Journal of Electronic Materials, 2018, 47, 7114-7128.	2.2	0