Jia-An Yan

List of Publications by Year
in descending order

37 papers	3,466 citations	279701 23 h-index	330025 37 g-index
38 all docs	38 docs citations	38 times ranked	5791 citing authors

#	Article	IF	Citations
1	Enhanced Thermoelectric Efficiency via Orthogonal Electrical and Thermal Conductances in Phosphorene. Nano Letters, 2014, 14, 6393-6399.	4.5	680
2	Structural and Electronic Properties of Oxidized Graphene. Physical Review Letters, 2009, 103, 086802.	2.9	463
3	Strain-tunable magnetic anisotropy in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>CrCl</mml:mi><mml:mn>3</mml:mn></mml:msub></mml , <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>CrBr</mml:mi><mml:mn>3</mml:mn></mml:msub></mml , and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>CrI</mml:mi><mml:mn>3</mml:mn></mml:msub></mml	1.1	405
4	Oxidation functional groups on graphene: Structural and electronic properties. Physical Review B, 2010, 82, .	1.1	328
5	Phonon dispersions and vibrational properties of monolayer, bilayer, and trilayer graphene: Density-functional perturbation theory. Physical Review B, 2008, 77, .	1.1	196
6	Coupling and Stacking Order of ReS₂ Atomic Layers Revealed by Ultralow-Frequency Raman Spectroscopy. Nano Letters, 2016, 16, 1404-1409.	4.5	139
7	Tuning the electronic structure of silicene and germanene by biaxial strain and electric field. Physical Review B, 2015, 91, .	1.1	137
8	Generalized-stacking-fault energy and dislocation properties inbccFe:â€ƒA first-principles study. Physical Review B, 2004, 70, .	1.1	111
9	Electron-phonon coupling in two-dimensional silicene and germanene. Physical Review B, 2013, 88, .	1.1	103
10	Size and orientation dependence in the electronic properties of silicon nanowires. Physical Review B, 2007, 76, .	1.1	101
11	Distinct spinâ€“lattice and spinâ€“phonon interactions in monolayer magnetic CrI₃. Physical Chemistry Chemical Physics, 2018, 20, 23546-23555.	1.3	84
12	Stability and properties of high-buckled two-dimensional tin and lead. Physical Review B, 2014, 90, .	1.1	80
13	Layered material GeSe and vertical GeSe/MoS2 p-n heterojunctions. Nano Research, 2018, 11, 420-430.	5.8	74
14	First-principles study of the electronic structures of icosahedral TiNâ€Š(N=13,19,43,55) clusters. Journal of Chemical Physics, 2004, 120, 8463-8468.	1.2	49
15	Band Gap Characters and Ferromagnetic/Antiferromagnetic Coupling in Group-IV Monolayers Tuned by Chemical Species and Hydrogen Adsorption Configurations. Nanoscale Research Letters, 2015, 10, 1040.	3.1	46
16	Recent Progress on Irradiation-Induced Defect Engineering of Two-Dimensional 2H-MoS2 Few Layers. Applied Sciences (Switzerland), 2019, 9, 678.	1.3	46
17	Electron-phonon interactions for optical-phonon modes in few-layer graphene: First-principles calculations. Physical Review B, 2009, 79, .	1.1	44
18	Structural, electronic and vibrational properties of few-layer 2H- and 1T-TaSe2. Scientific Reports, 2015, 5, 16646.	1.6	44

#	Article	IF	Citations
19	Stacking-dependent interlayer phonons in 3R and 2H MoS ₂. 2D Materials, 2019, 6, 025022.	2.0	37
20	Probing the uniaxial strains in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>MoS</mml:mtext><mml:mn>2</mml:mn></mml:msub> polarized Raman spectroscopy: A first-principles study. Physical Review B, 2016, 93, .	3.6	36
21	Interlayer breathing and shear modes in NbSe ₂ atomic layers. 2D Materials, 2016, 3, 031008.	2.0	33
22	Size- and Strain-Dependent Electronic Structures in H-Passivated Si [112] Nanowires. Journal of Physical Chemistry C, 2008, 112, 15680-15683.	1.5	25
23	Electronic and vibrational properties ofÎ³â^'AlH3. Physical Review B, 2008, 77, .	1.1	25
24	Electronic states and doping effect of carbon in the edge-dislocation core of bcc iron. Physical Review B, 2004, 69, .	1.1	24
25	Highly tunable Raman scattering and transport in layered magnetic Cr ₂ S ₃ nanoplates grown by sulfurization. 2D Materials, 2019, 6, 035029.	2.0	24
26	Strain-tunable topological quantum phase transition in buckled honeycomb lattices. Applied Physics Letters, 2015, 106, .	1.5	22
27	Basic Concepts and Recent Advances of Crystallographic Orientation Determination of Graphene by Raman Spectroscopy. Crystals, 2018, 8, 375.	1.0	21
28	Time-domain simulation of electron diffraction in crystals. Physical Review B, 2011, 84, .	1.1	17
29	Enhanced optical conductivity induced by surface states in ABC-stacked few-layer graphene. Physical Review B, 2011, 83, .	1.1	17
30	Structural Monoclinicity and Its Coupling to Layered Magnetism in Few-Layer CrI₃. ACS Nano, 2021, 15, 10444-10450.	7.3	14
31	Electron Talbot effect on graphene. Physical Review B, 2016, 93, .	1.1	12
32	First-principles study of boron segregation to the edge dislocation inB2-ordered FeAl. Physical Review B, 2005, 72, .	1.1	10
33	Energetics, electronic structure and local magnetism of single 3d impurity in GaAs. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 324, 247-253.	0.9	7
34	Optical phonon anomaly in Bernal stacked bilayer graphene with ultrahigh carrier densities. Physical Review B, 2012, 86, .	1.1	3
35	Electric-field effects on the optical vibrations in AB-stacked bilayer graphene. Physical Review B, 2013, 87, .	1.1	3
36	Raman spectra and elastic light scattering dynamics of V3O5 across insulatorâ€“metal transition. Journal of Applied Physics, 2021, 129, 025111.	1.1	3

#	Article	IF	Citations
37	CBED Investigations of Boron Monoarsenide Crystals. Microscopy and Microanalysis, 2018, 24, 30-31.	0.2	0