Xihong Peng

List of Publications by Year
in descending order

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32 papers	2,508 citations	516215 16 h-index	454577 30 g-index
32 all docs	32 docs citations	32 times ranked	3390 citing authors

#	Article	IF	Citations
1	Electronic properties of hydrogen/fluorine adsorbed two-dimensional C568: A first-principles study. Surfaces and Interfaces, 2022, 31, 102067.	1.5	1
2	A new 2D auxetic CN₂ nanostructure with high energy density and mechanical strength. Physical Chemistry Chemical Physics, 2021, 23, 4353-4364.	1.3	8
3	Structural Origin of Reversible Li Insertion in Guestâ€Free, Typeâ€I Silicon Clathrates. Advanced Energy and Sustainability Research, 2021, 2, 2000114.	2.8	12
4	New stable two dimensional silicon carbide nanosheets. Journal of Alloys and Compounds, 2021, 868, 159201.	2.8	8
5	New stable 2D and 3D GeC2 crystal structures predicted by first-principles study. Materials Today Communications, 2021, 28, 102567.	0.9	0
6	Structural and Electrochemical Properties of Type VIII Ba₈Ga_{16â^'Î´}Sn_{30+Î´} Clathrate (Î´ â‰ˆ 1) during Lithiation. ACS Applied Materials & Interfaces, 2021, 13, 42564-42578.	4.0	3
7	Role of Alkali Metal in BiVO₄ Crystal Structure for Enhancing Charge Separation and Diffusion Length for Photoelectrochemical Water Splitting. ACS Applied Materials & Interfaces, 2020, 12, 52808-52818.	4.0	28
8	Electronic properties of fluorine/hydrogen adsorbed two-dimensional tetrahex-carbon: A first-principles study. Applied Surface Science, 2020, 529, 147150.	3.1	2
9	Systematic theoretical study of carbon nanotubes rolled from a two-dimensional tetrahex-carbon nanosheet. Physical Review B, 2020, 102, .	1.1	6
10	Tunable magnetism through edge functionalization in zigzag green phosphorene nanoribbons. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126672.	0.9	0
11	Auxetic Tetrahex Carbon with Ultrahigh Strength and a Direct Band Gap. Physical Review Applied, 2020, 13, .	1.5	23
12	Quantum confinement and edge effects on electronic properties of zigzag green phosphorene nanoribbons. Journal of Physics Condensed Matter, 2020, 32, 175301.	0.7	3
13	Enhanced carrier mobility in anisotropic two-dimensional tetrahex-carbon through strain engineering. Carbon, 2020, 165, 37-44.	5.4	15
14	Six new silicon phases with direct band gaps. Physical Chemistry Chemical Physics, 2019, 21, 19963-19968.	1.3	16
15	Ab Initio Investigation of Li and Na Migration in Guest-Free, Type I Clathrates. Journal of Physical Chemistry C, 2019, 123, 22812-22822.	1.5	11
16	Size and strain effects on mechanical and electronic properties of green phosphorene nanoribbons. AIP Advances, 2018, 8, .	0.6	4
17	Experimental and Computational Study of the Lithiation of Ba8AlyGe46â€“y Based Type I Germanium Clathrates. ACS Applied Materials & Interfaces, 2018, 10, 37981-37993.	4.0	17
18	Superior mechanical flexibility and strained-engineered direct-indirect band gap transition of green phosphorene. Applied Physics Letters, 2018, 112, .	1.5	25

#	Article	IF	Citations
19	First-Principles Study of Lithiation of Type I Ba-Doped Silicon Clathrates. Journal of Physical Chemistry C, 2015, 119, 28247-28257.	1.5	22
20	Chemical scissors cut phosphorene nanostructures. Materials Research Express, 2014, 1, 045041.	0.8	20
21	Electrochemical and Photoelectrochemical Properties of the Copper Hydroxyphosphate Mineral Libethenite. ChemElectroChem, 2014, 1, 663-672.	1.7	15
22	Edge effects on the electronic properties of phosphorene nanoribbons. Journal of Applied Physics, 2014, 116, .	1.1	157
23	Electrochemical Cycling of Sodiumâ€Filled Silicon Clathrate. ChemElectroChem, 2014, 1, 347-353.	1.7	29
24	Strain-engineered direct-indirect band gap transition and its mechanism in two-dimensional phosphorene. Physical Review B, 2014, 90, .	1.1	797
25	Superior mechanical flexibility of phosphorene and few-layer black phosphorus. Applied Physics Letters, 2014, 104, .	1.5	881
26	Origination of the direct-indirect band gap transition in strained wurtzite and zinc-blende GaAs nanowires: A first principles study. Physical Review B, 2013, 87, .	1.1	48
27	Engineering direct-indirect band gap transition in wurtzite GaAs nanowires through size and uniaxial strain. Applied Physics Letters, 2012, 100, 193108.	1.5	39
28	Engineering the work function of armchair graphene nanoribbons using strain and functional species: a first principles study. Journal of Physics Condensed Matter, 2012, 24, 075501.	0.7	61
29	Band structure of Si/Ge coreâ€“shell nanowires along the [110] direction modulated by external uniaxial strain. Journal of Physics Condensed Matter, 2011, 23, 115502.	0.7	34
30	Strain modulated band gap of edge passivated armchair graphene nanoribbons. Applied Physics Letters, 2011, 98, 023112.	1.5	69
31	Electronic properties of strained Si/Ge core-shell nanowires. Applied Physics Letters, 2010, 96, .	1.5	83
32	Strain-modulated electronic properties of Ge nanowires: A first-principles study. Physical Review B, 2009, 80, .	1.1	71