

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

44 papers	8,419 citations	26 h-index	46 g-index
46 ext. papers	9,453 ext. citations	8.8 avg, IF	6.41 L-index

#	Paper	IF	Citations
44	Phosphorene: an unexplored 2D semiconductor with a high hole mobility. <i>ACS Nano</i> , 2014 , 8, 4033-41	16.7	4487
43	Semiconducting layered blue phosphorus: a computational study. <i>Physical Review Letters</i> , 2014 , 112, 176802	7.4	836
42	Recent progress in 2D group-VA semiconductors: from theory to experiment. <i>Chemical Society Reviews</i> , 2018 , 47, 982-1021	58.5	549
41	Phase coexistence and metal-insulator transition in few-layer phosphorene: a computational study. <i>Physical Review Letters</i> , 2014 , 113, 046804	7.4	451
40	Antimonene Oxides: Emerging Tunable Direct Bandgap Semiconductor and Novel Topological Insulator. <i>Nano Letters</i> , 2017 , 17, 3434-3440	11.5	217
39	The Nature of the Interlayer Interaction in Bulk and Few-Layer Phosphorus. <i>Nano Letters</i> , 2015 , 15, 8170-8175	11.5	205
38	Conducting linear chains of sulphur inside carbon nanotubes. <i>Nature Communications</i> , 2013 , 4, 2162	17.4	176
37	Strain-induced metal-semiconductor transition in monolayers and bilayers of gray arsenic: A computational study. <i>Physical Review B</i> , 2015 , 91,	3.3	159
36	Designing Isoelectronic Counterparts to Layered Group V Semiconductors. <i>ACS Nano</i> , 2015 , 9, 8284-90	16.7	115
35	Semiconductor-topological insulator transition of two-dimensional SbAs induced by biaxial tensile strain. <i>Physical Review B</i> , 2016 , 93,	3.3	111
34	Tiling phosphorene. <i>ACS Nano</i> , 2014 , 8, 12763-8	16.7	109
33	Observation of ballistic avalanche phenomena in nanoscale vertical InSe/BP heterostructures. <i>Nature Nanotechnology</i> , 2019 , 14, 217-222	28.7	99
32	Two-Dimensional Phosphorus Carbide: Competition between sp(2) and sp(3) Bonding. <i>Nano Letters</i> , 2016 , 16, 3247-52	11.5	98
31	Two-dimensional BX (X = P, As, Sb) semiconductors with mobilities approaching graphene. <i>Nanoscale</i> , 2016 , 8, 13407-13	7.7	84
30	High Stability of Faceted Nanotubes and Fullerenes of Multiphase Layered Phosphorus: A Computational Study. <i>Physical Review Letters</i> , 2014 , 113, 226801	7.4	73
29	Structural Transition in Layered As(1-x)P(x) Compounds: A Computational Study. <i>Nano Letters</i> , 2015 , 15, 6042-6	11.5	63
28	Two-dimensional SiP: an unexplored direct band-gap semiconductor. <i>2D Materials</i> , 2017 , 4, 015030	5.9	59

27	Evidence of diamond nanowires formed inside carbon nanotubes from diamantane dicarboxylic acid. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 3717-21	16.4	57
26	Effect of structural defects on the thermal conductivity of graphene: From point to line defects to haeckelites. <i>Physical Review B</i> , 2014 , 89,	3.3	51
25	Ultrathin tellurium dioxide: emerging direct bandgap semiconductor with high-mobility transport anisotropy. <i>Nanoscale</i> , 2018 , 10, 8397-8403	7.7	43
24	Electronic and protonic conduction in LaFeO ₃ . <i>Journal of Materials Chemistry A</i> , 2017 , 5, 15367-15379	13	30
23	Topologically protected conduction state at carbon foam surfaces: an ab initio study. <i>Physical Review Letters</i> , 2014 , 112, 026803	7.4	30
22	Search for the largest two-dimensional aggregates of boron: An ab initio study. <i>Physical Review B</i> , 2011 , 83,	3.3	29
21	Simulated scanning tunneling microscopy images of few-layer phosphorus capped by graphene and hexagonal boron nitride monolayers. <i>Physical Review B</i> , 2015 , 91,	3.3	27
20	Formation and stability of cellular carbon foam structures: an ab initio study. <i>Physical Review Letters</i> , 2012 , 109, 135501	7.4	27
19	Mechanistic Understanding of Two-Dimensional Phosphorus, Arsenic, and Antimony High-Capacity Anodes for Fast-Charging Lithium/Sodium Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 29559-29567	3.8	27
18	Spontaneous graphitization of ultrathin cubic structures: a computational study. <i>Nano Letters</i> , 2014 , 14, 7126-30	11.5	26
17	DFT coupled with NEGF study of a promising two-dimensional channel material: black phosphorene-type GaTeCl. <i>Nanoscale</i> , 2018 , 10, 3350-3355	7.7	25
16	Optimizing electronic structure and quantum transport at the graphene-Si(111) interface: an ab initio density-functional study. <i>Physical Review Letters</i> , 2013 , 110, 176805	7.4	22
15	Local curvature and stability of two-dimensional systems. <i>Physical Review B</i> , 2014 , 90,	3.3	19
14	Electronic structure and transport in graphene/haeckelite hybrids: an ab initio study. <i>2D Materials</i> , 2015 , 2, 035001	5.9	15
13	Unusual Electronic Transitions in Two-dimensional Layered SnSb ₂ Te ₄ Driven by Electronic State Rehybridization. <i>Physical Review Applied</i> , 2019 , 11,	4.3	14
12	Evidence of Diamond Nanowires Formed inside Carbon Nanotubes from Diamantane Dicarboxylic Acid. <i>Angewandte Chemie</i> , 2013 , 125, 3805-3809	3.6	13
11	Hydrogen intercalation in MoS ₂ . <i>Physical Review B</i> , 2016 , 94,	3.3	12
10	Limits of mechanical energy storage and structural changes in twisted carbon nanotube ropes. <i>Physical Review B</i> , 2013 , 88,	3.3	12

9	Theoretical investigation of the electronic structure and quantum transport in the graphene-C(111) diamond surface system. <i>Journal of Physics Condensed Matter</i> , 2013 , 25, 435302	1.8	10
8	Relative stability and local curvature analysis in carbon nanotube. <i>Physical Review B</i> , 2015 , 91,	3.3	9
7	Stability enhancement and electronic tunability of two-dimensional SbIV compounds via surface functionalization. <i>Applied Surface Science</i> , 2018 , 427, 363-368	6.7	8
6	Stability and electronic properties of two-dimensional indium iodide. <i>Physical Review B</i> , 2017 , 95,	3.3	7
5	Fundamental band gap and alignment of two-dimensional semiconductors explored by machine learning. <i>Chinese Physics B</i> , 2020 , 29, 046101	1.2	6
4	Hydrogen-Induced Degradation of NaMnO ₂ . <i>Chemistry of Materials</i> , 2019 , 31, 5224-5228	9.6	5
3	Tailoring electronic properties of two-dimensional antimonene with isoelectronic counterparts. <i>Chinese Physics B</i> , 2020 , 29, 037305	1.2	2
2	Enhancing mechanical toughness of aluminum surfaces by nano-boron implantation: An ab initio study. <i>Chemical Physics Letters</i> , 2015 , 620, 25-28	2.5	1
1	Innenteilbild: Evidence of Diamond Nanowires Formed inside Carbon Nanotubes from Diamantane Dicarboxylic Acid (Angew. Chem. 13/2013). <i>Angewandte Chemie</i> , 2013 , 125, 3622-3622	3.6	