Jacek A Majewski

List of Publications by Year
in descending order

51 papers	4,214 citations	361045 20 h-index	276539 41 g-index
51 all docs	51 docs citations	51 times ranked	4296 citing authors

#	Article	IF	Citations
1	Generalized Kohn-Sham schemes and the band-gap problem. Physical Review B, 1996, 53, 3764-3774.	1.1	1,075
2	Pyroelectric properties of Al(In)GaN/GaN hetero- and quantum well structures. Journal of Physics Condensed Matter, 2002, 14, 3399-3434.	0.7	864
3	Exact exchange Kohn-Sham formalism applied to semiconductors. Physical Review B, 1999, 59, 10031-10043.	1.1	358
4	Exact Kohn-Sham Exchange Potential in Semiconductors. Physical Review Letters, 1997, 79, 2089-2092.	2.9	329
5	First-principles studies of the structural and optical properties of crystalline poly(para-phenylene). Physical Review B, 1995, 51, 9668-9676.	1.1	231
6	Experimental probing of the interplay between ferromagnetism and localization in (Ga,ÂMn)As. Nature Physics, 2010, 6, 22-25.	6.5	211
7	Simple model for structural properties and crystal stability ofsp-bonded solids. Physical Review B, 1987, 35, 9666-9682.	1.1	162
8	Exciton fine structure in undoped GaN epitaxial films. Physical Review B, 1996, 53, 16543-16550.	1.1	150
9	Ab initiocalculations of third-order elastic constants and related properties for selected semiconductors. Physical Review B, 2007, 76, .	1.1	109
10	Crystal Stability and Structural Transition Pressures ofsp-Bonded Solids. Physical Review Letters, 1986, 57, 1366-1369.	2.9	77
11	Van Der Waals Density Functionals for Graphene Layers and Graphite. Acta Physica Polonica A, 2011, 120, 845-848.	0.2	77
12	Functionalization of carbon nanotubes with â€“CHn, â€“NHn fragments, â€“COOH and â€“OH groups. Journal of Chemical Physics, 2013, 138, 194704.	1.2	55
13	Stability and band offsets of polar GaN/SiC(001) and AlN/SiC(001) interfaces. Physical Review B, 1997, 56, 6911-6920.	1.1	52
14	Origin of Bulk Uniaxial Anisotropy in Zinc-Blende Dilute Magnetic Semiconductors. Physical Review Letters, 2012, 108, 237203.	2.9	52
15	Graphene-Based Sensors: Theoretical Study. Journal of Physical Chemistry C, 2014, 118, 17395-17401.	1.5	45
16	Advances in the theory of electronic structure of semiconductors. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 2003-2027.	0.8	43
17	Manipulating Mnâ€“Mgk cation complexes to control the charge- and spin-state of Mn in GaN. Scientific Reports, 2012, 2, 722.	1.6	43
18	Mechanical and electrical properties of carbon nanotubes and graphene layers functionalized with amines. Diamond and Related Materials, 2012, 23, 167-171.	1.8	32

#	Article	IF	Citations
19	Elastic properties of functionalized carbon nanotubes. Physical Chemistry Chemical Physics, 2013, 15, 14303.	1.3	26
20	Surface-Related Features Responsible for Cytotoxic Behavior of MXenes Layered Materials Predicted with Machine Learning Approach. Materials, 2020, 13, 3083.	1.3	22
21	Borohydride as Magnetic Superexchange Pathway in Late Lanthanide Borohydrides. European Journal of Inorganic Chemistry, 2019, 2019, 1776-1783.	1.0	18
22	Forces and atomic relaxation in density functional theory with the pseudopotential self-interaction correction. Physical Review B, 2011, 84, .	1.1	16
23	Stability and electronic structure of covalently functionalized graphene layers. Physica Status Solidi (B): Basic Research, 2013, 250, 1474-1477.	0.7	16
24	Electronic structure of graphene functionalized with boron and nitrogen. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1167-1171.	0.8	15
25	(Ga,Mn)As under pressure: A first-principles investigation. Physical Review B, 2015, 91, .	1.1	15
26	Ordering in ternary nitride semiconducting alloys. Physical Review B, 2012, 85, .	1.1	12
27	Energy decomposition analysis of neutral and negatively charged borophenes. FlatChem, 2018, 7, 42-47.	2.8	12
28	Grapheneâ€“Iron(II) Phthalocyanine Hybrid Systems for Scalable Molecular Spintronics. Journal of Physical Chemistry C, 2020, 124, 27645-27655.	1.5	12
29	Electronic structure and magneto-optical properties of silicon-nitrogen-vacancy complexes in diamond. Physical Review B, 2020, 102, .	1.1	10
30	Superexchange dominates in magnetic topological insulators. Physical Review B, 2021, 104, .	1.1	10
31	Mechanical, electrical, and magnetic properties of functionalized carbon nanotubes. , 2011, , .		9
32	Nematicity of correlated systems driven by anisotropic chemical phase separation. Physical Review Materials, 2018, 2, .	0.9	9
33	Nitride heterostructures: a system for high frequency electronics. Computational Materials Science, 2004, 30, 81-91.	1.4	7
34	Assessment of approaches for dispersive forces employing semihydrogenated graphene as a case study. Computational Materials Science, 2021, 186, 109940.	1.4	7
35	Pressure and temperature dependence of gain in InGaAs/GaAs laser diode. Physica Status Solidi (B): Basic Research, 2012, 249, 217-221.	0.7	6
36	Morphology, Ordering, Stability, and Electronic Structure of Carbonâ€Doped Hexagonal Boron Nitride. Physica Status Solidi (B): Basic Research, 2019, 256, 1800554.	0.7	5

#	Article	IF	Citations
37	Nonlinear piezoelectric properties of GaN quantum dots nucleated at the edge of threading dislocations. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2399-2402.	0.8	4
38	Efficient implementation of the many-body Reactive Bond Order (REBO) potential on GPU. Journal of Computational Physics, 2016, 321, 556-570.	1.9	4
39	Ab initio studies of Co2FeAl1â^'xSix Heusler alloys. Journal of Magnetism and Magnetic Materials, 2016, 409, 62-65.	1.0	3
40	Energetic, electronic, and magnetic properties of Mn pairs on reconstructed (001) GaAs surfaces. Physical Review B, 2017, 95, .	1.1	3
41	Ab initio studies of carbon dioxide affinity to carbon compounds and minerals. Energy Procedia, 2017, 125, 450-456.	1.8	3
42	FrÃ¶hlich resonance in carbon nanospiroids and the 2175 Ã… interstellar absorption feature. Nuclear Instruments & Methods in Physics Research B, 2017, 393, 59-62.	0.6	3
43	Ab-initio study of structural, mechanical and electronic properties of functionalized carbon nanotubes. , 2013, , .		2
44	Pressure dependence of elastic constants in wurtzite and zinc-blende nitrides and their influence on the optical pressure coefficients in nitride heterostructures. Materials Research Society Symposia Proceedings, 2004, 831, 120.	0.1	0
45	Theory of Spin Transport Across Domain-Walls in (Ga,Mn)As. AIP Conference Proceedings, 2007, , .	0.3	0
46	Spin Splitting in Semiconductorsâ€"Predictions of Relativistic Exact Exchange Density Functional Theory. , 2010, , .		0
47	Zero field spin induced by strain and symmetry reduction semiconductors and their heterostructures. , 2011, , .		0
48	Mechanical, electronic, and transport properties of functionalized graphene monolayers from ab initio studies. , 2013, , .		0
49	Monte Carlo studies of ordering in nitride ternary alloys. , 2013, , .		0
50	Ab initio modeling of graphene layer functionalized with boron and nitrogen. , 2013, , .		0
51	BASICS OF SPINTRONICS: FROM METALLIC TO ALL-SEMICONDUCTOR MAGNETIC TUNNEL JUNCTIONS. , 2008, , .		0