T BjÃ¶rkman

List of Publications by Year
in descending order

40 papers	4,590 citations	279487 23 h-index	288905 40 g-index
40 all docs	40 docs citations	40 times ranked	8376 citing authors

#	Article	IF	Citations
1	Reproducibility in density functional theory calculations of solids. Science, 2016, 351, aad3000.	6.0	1,113
2	van der Waals Bonding in Layered Compounds from Advanced Density-Functional First-Principles Calculations. Physical Review Letters, 2012, 108, 235502.	2.9	851
3	Triazineâ€Based Graphitic Carbon Nitride: a Twoâ€Dimensional Semiconductor. Angewandte Chemie - International Edition, 2014, 53, 7450-7455.	7.2	523
4	Single-Layer ReS₂: Two-Dimensional Semiconductor with Tunable In-Plane Anisotropy. ACS Nano, 2015, 9, 11249-11257.	7.3	353
5	Two-Dimensional Materials from Data Filtering andAb InitioCalculations. Physical Review X, 2013, 3, .	2.8	180
6	Three-fold rotational defects in two-dimensional transition metal dichalcogenides. Nature Communications, 2015, 6, 6736.	5.8	179
7	Testing several recent van der Waals density functionals for layered structures. Journal of Chemical Physics, 2014, 141, 074708.	1.2	145
8	Are we van der Waals ready?. Journal of Physics Condensed Matter, 2012, 24, 424218.	0.7	129
9	CIF2Cell: Generating geometries for electronic structure programs. Computer Physics Communications, 2011, 182, 1183-1186.	3.0	128
10	Van der Waals interactions and the limits of isolated atom models at interfaces. Nature Communications, 2016, 7, 11559.	5.8	111
11	Charge self-consistent dynamical mean-field theory based on the full-potential linear muffin-tin orbital method: Methodology and applications. Computational Materials Science, 2012, 55, 295-302.	1.4	98
12	Advances in Density-Functional Calculations for Materials Modeling. Annual Review of Materials Research, 2019, 49, 1-30.	4.3	87
13	Defects in bilayer silica and graphene: common trends in diverse hexagonal two-dimensional systems. Scientific Reports, 2013, 3, 3482.	1.6	80
14	van der Waals density functional for solids. Physical Review B, 2012, 86, .	1.1	74
15	High-temperature phonon stabilization of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î³</mml:mi></mml:math>-uranium from relativistic first-principles theory. Physical Review B, 2012, 85, .	1.1	59
16	First-principles study of Co- and Cu-doped<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>Ni</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:n the tetragonal deformation path. Physical Review B, 2014, 89, .	1.1	53
17	Solubility of Boron, Carbon, and Nitrogen in Transition Metals: Getting Insight into Trends from First-Principles Calculations. Journal of Physical Chemistry Letters, 2015, 6, 3263-3268.	2.1	50
18	First-principles investigation of two-dimensional trichalcogenide and sesquichalcogenide monolayers. Physical Review B, 2016, 93, .	1.1	44

#	Article	IF	Citations
19	High-throughput and data-mining approach to predict new rare-earth free permanent magnets. Physical Review B, 2020, 101, .	1.1	34
20	In Situ Growth of Cellular Two-Dimensional Silicon Oxide on Metal Substrates. ACS Nano, 2013, 7, 5175-5180.	7.3	31
21	Electronic structure and magnetic properties of Mn, Co, and Ni substitution of Fe in Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>4</mml:mn></mml:msub></mml:math>N. Physical Review B, 2013, 88, .	1.1	29
22	Order-disorder induced magnetic structures of FeMnP0.75Si0.25. Physical Review B, 2011, 83, .	1.1	27
23	Toward Stronger Alâ€“BN Nanotube Composite Materials: Insights into Bonding at the Al/BN Interface from First-Principles Calculations. Journal of Physical Chemistry C, 2014, 118, 26894-26901.	1.5	24
24	Observation of charge density waves in free-standing 1T-TaSe2 monolayers by transmission electron microscopy. Applied Physics Letters, 2018, 113, .	1.5	24
25	Electronic properties of several two dimensional halides from ab initio calculations. Beilstein Journal of Nanotechnology, 2019, 10, 823-832.	1.5	24
26	Crystal and magnetic structure investigation ofTbNi5â^'xCux(x=0,0.5,1.0,1.5,2.0): Experiment and theory. Physical Review B, 2006, 74, .	1.1	22
27	Vibrational Properties of a Two-Dimensional Silica Kagome Lattice. ACS Nano, 2016, 10, 10929-10935.	7.3	18
28	Combining electronic structure and many-body theory with large databases: A method for predicting the nature of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>4</mml:mn><mml:mi>f</mml:mi></mml:mrow></mml:m states in Ce compounds. Physical Review Materials, 2017, 1, .	0.9	16
29	Adaptive smearing for Brillouin zone integration. International Journal of Quantum Chemistry, 2011, 111, 1025-1030.	1.0	13
30	Dynamical stabilization of the body centered cubic phase in lanthanum and thorium by phononâ€“phonon interaction. Journal of Physics Condensed Matter, 2009, 21, 175402.	0.7	12
31	Ab Initio Study of Properties of Co- and Cu- Doped Ni-Mn-Ga Alloys. Materials Today: Proceedings, 2015, 2, S601-S604.	0.9	8
32	2D Structures Beyond Graphene. Semiconductors and Semimetals, 2016, 95, 1-33.	0.4	8
33	Coupling between the4fcore binding energy and the5fvalence band occupation of elemental Pu and Pu-based compounds. Physical Review B, 2008, 78, .	1.1	7
34	Solid-State Growth of One- and Two-Dimensional Silica Structures on Metal Surfaces. Journal of Physical Chemistry C, 2014, 118, 21001-21005.	1.5	7
35	Effects of electron beam generated lattice defects on the periodic lattice distortion structure in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:mi>T</mml:mi><mml:mtext>â^'</m mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:mi>T</mml:mi><mml:mtext>â^'	1.1	7
36	Launching the Theoretical Crystallography Open Database. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, C1736-C1736.	0.0	6

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37	Substitutional carbon doping of free-standing and Ru-supported BN sheets: a first-principles study. Journal of Physics Condensed Matter, 2017, 29, 415301.	0.7	5
38	Theoretical studies of the incommensurate magnetic structure of a heavy fermion system:CeRhIn5. Physical Review B, 2010, 81, .	1.1	4
39	Realistic first-principles calculations of the magnetocaloric effect: applications to hcp Gd. Materials Research Letters, 2022, 10, 156-162.	4.1	4
40	Effect of Magnetic Ordering on the Stability of Niâ€“Mnâ€“Ga(â€“Coâ€“Cu) Alloys Along the Tetragonal Deformation Path. IEEE Transactions on Magnetics, 2017, 53, 1-6.	1.2	3