Wolfram Hergert

List of Publications by Year
in descending order

29 papers	703 citations	567281 15 h-index	552781 26 g-index
30 all docs	30 docs citations	30 times ranked	1230 citing authors

#	Article	IF	Citations
1	Exchange coupling in transition metal monoxides: Electronic structure calculations. Physical Review B, 2009, 80, .	3.2	107
2	Defect-Induced Magnetism in Solids. IEEE Transactions on Magnetics, 2013, 49, 4668-4674.	2.1	87
3	Oxygen-vacancy-induced local ferromagnetism as a driving mechanism in enhancing the magnetic response of ferrites. Physical Review B, 2014, 89, .	3.2	80
4	Numerical solution of the relativistic single-site scattering problem for the Coulomb and the Mathieu potential. Journal of Physics Condensed Matter, 2015, 27, 435202.	1.8	40
5	Magnetic properties of defect-free and oxygen-deficient cubic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi mathvariant="normal">SrCoO</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn><mml:mo>â”’</mml:mo><mml:mi>1</mml:mi></mml:m Physical Review B, 2015, 92, .	3.2	32
6	Magnetic and Electronic Properties of Complex Oxides from Firstâ€Principles. Physica Status Solidi (B): Basic Research, 2020, 257, 1900671.	1.5	31
7	Toward Versatile Sr₂FeMoO₆-Based Spintronics by Exploiting Nanoscale Defects. ACS Applied Materials & Interfaces, 2016, 8, 20440-20447.	8.0	30
8	Defectâ€Induced Magnetism in Nonmagnetic Oxides: Basic Principles, Experimental Evidence, and Possible Devices with ZnO and TiO₂. Physica Status Solidi (B): Basic Research, 2020, 257, 1900623.	1.5	26
9	Room-temperaturep-induced surface ferromagnetism: First-principles study. Physical Review B, 2011, 84, .	3.2	22
10	First-principles study of uniaxial strained and bent ZnO wires. Physical Review B, 2014, 89, .	3.2	22
11	Variation of magnetic properties of Sr₂FeMoO₆ due to oxygen vacancies. Journal of Physics Condensed Matter, 2018, 30, 305801.	1.8	21
12	Effect of hydrostatic pressure and uniaxial strain on the electronic structure of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Pb</mml:mi><mml:mrow><mml:mn>1</mml:mn> Physical Review B, 2015, 92, .	3.2	18
13	Chromium point defects in hexagonal<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>BaTiO</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub> A comparative study of first-principles calculations and experiments. Physical Review B, 2015, 91, .	3.2	17
14	GTPack: A Mathematica Group Theory Package for Application in Solid-State Physics and Photonics. Frontiers in Physics, 2018, 6, .	2.1	17
15	Study of charged defects for substitutionally doped chromium in hexagonal barium titanate from firstâ€principles theory. Physica Status Solidi - Rapid Research Letters, 2014, 8, 527-531.	2.4	15
16	Orientation-dependent electron-energy-loss spectroscopy ofTiO2: A comparison of theory and experiment. Physical Review B, 2006, 73, .	3.2	14
17	Quasicrystals and their Approximants in 2D Ternary Oxides. Physica Status Solidi (B): Basic Research, 2020, 257, 1900624.	1.5	13
18	Analysis of the scattering properties of 3D non-spherical plasmonic nanoparticles accounting for non-local effects. Journal of Modern Optics, 2018, 65, 1778-1786.	1.3	11

#	Article	IF	Citations
19	Producing ZnFe2O4 thin films from ZnO/FeO multilayers. Applied Surface Science, 2017, 393, 256-261.	6.1	10
20	Titanium 3d ferromagnetism with perpendicular anisotropy in defective anatase. Physical Review B, 2020, 101, .	3.2	10
21	First-principles investigations of the magnetic phase diagram of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Gd</mml:mi><mml:mrow><mml:mn>1</mml:mn> Physical Review B, 2019, 99, .	3.2	9
22	Elastic anomalies and long/short-range ordering effects: A first-principles investigation of the AgcPd1âˆ'csolid solution. Physical Review B, 2012, 86, .	3.2	8
23	Application of Generalized Mie Theory to EELS Calculations as a Tool for Optimization of Plasmonic Structures. Plasmonics, 2016, 11, 865-874.	3.4	7
24	Tuning the probability of defect formation via substrate strains in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Sr</mml:mi><mml:mn>2</mml:mn></mml:m films. Physical Review Materials, 2018, 2, .	2.4	7
25	Theoretical investigation of iron incorporation in hexagonal barium titanate. Physical Review B, 2019, 100, .	3.2	6
26	Influence of surface band bending on a narrow band gap semiconductor: Tunneling atomic force studies of graphite with Bernal and rhombohedral stacking orders. Physical Review Materials, 2021, 5, .	2.4	5
27	Ab initiostudy of thep-hole magnetism at polar surfaces of ZnO: the role of correlations. Journal of Physics Condensed Matter, 2016, 28, 016003.	1.8	4
28	Electronic and Magnetic Properties of BaFeO3on the Pt(111) Surface in a Quasicrystalline Approximant Structure. Physica Status Solidi (B): Basic Research, 2020, 257, 1900649.	1.5	4
29	Magnetic Structure of Bulk GdMnO 3 : Influence of Strain. Physica Status Solidi (B): Basic Research, 2020, 257, 1900632.	1.5	3