Assocâ€Prof Hannes Raebiger

List of Publications by Year
in descending order

53 papers	1,897 citations	471509 17 h-index	276875 41 g-index
54 all docs	54 docs citations	54 times ranked	2942 citing authors

#	Article	IF	Citations
1	Parallel Alignment of Methylammonium Cations in an Orthorhombic CH₃NH₃PbCl₃ Single Crystal Observed by Polarized Micro-Raman Scattering Spectroscopy. Chemistry of Materials, 2022, 34, 2972-2980.	6.7	3
2	Electronic and magnetic properties of carbide MXenesâ€"the role of electron correlations. Materials Today Advances, 2021, 9, 100118.	5.2	35
3	MXene Phase with C₃ Structure Unit: A Family of 2D Electrides. Advanced Functional Materials, 2021, 31, 2100009.	14.9	13
4	2D Electrides: MXene Phase with C₃ Structure Unit: A Family of 2D Electrides (Adv. Funct.) Tj ETQq0 0 0 rgBT /Overlock 10	14.9	0
5	Normalization of exact quasiparticle wave functions in the Green's function method guaranteed by the Ward identity. Physical Review B, 2021, 104, .	3.2	3
6	Strain Engineering to Release Trapped Hole Carriers in p-Type Haeckelite GaN. ACS Applied Electronic Materials, 2021, 3, 5257-5264.	4.3	1
7	Modulation of the optical absorption edge of Îµ- and Îºâ€‰-â€‰Ga2O3 due to Co impurities caused by band structure changes: Work function measurements and first-principle calculations. Journal of Applied Physics, 2020, 127, 065701.	2.5	4
8	Electronic mechanism for resistive switching in metal/insulator/metal nanodevices. Journal Physics D: Applied Physics, 2020, 53, 295302.	2.8	1
9	Carrier mediated ferromagnetism in Ga₂O₃:Cr. Applied Physics Express, 2020, 13, 021002.	2.4	6
10	Reply to Correspondence on â€œCore Electron Topologies in Chemical Compounds: Case Study of Carbon versus Siliconâ€ Angewandte Chemie - International Edition, 2019, 58, 10408-10409.	13.8	0
11	Reply to Correspondence on â€œCore Electron Topologies in Chemical Compounds: Case Study of Carbon versus Siliconâ€ Angewandte Chemie, 2019, 131, 10516-10517.	2.0	0
12	First principles methods for defects: state-of-the-art and emerging approaches. , 2019, , 289-343.		2
13	Core Electron Topologies in Chemical Compounds: Case Study of Carbon versus Silicon. Angewandte Chemie, 2018, 130, 7130-7136.	2.0	6
14	Core Electron Topologies in Chemical Compounds: Case Study of Carbon versus Silicon. Angewandte Chemie - International Edition, 2018, 57, 7012-7018.	13.8	6
15	Frontispiz: Core Electron Topologies in Chemical Compounds: Case Study of Carbon versus Silicon. Angewandte Chemie, 2018, 130, .	2.0	0
16	Frontispiece: Core Electron Topologies in Chemical Compounds: Case Study of Carbon versus Silicon. Angewandte Chemie - International Edition, 2018, 57, .	13.8	0
17	Control of hole localization in magnetic semiconductors by axial strain. Physical Review Materials, 2018, 2, .	2.4	7
18	Defect-Induced Vibration Modes of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mi>Ar</mml:mi></mml:mrow><mml:mrow><mml:mo>+</mml:mo></mm -Irradiated <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>MoS</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></r Physical Review Applied, 2017, 7, .	3.8	58

#	Article	IF	Citations
19	Critical metal-insulator transition due to nuclear quantum effects in Mn-doped GaAs. Physical Review B, 2016, 94, .	3.2	7
20	Charge storage in oxygen deficient phases of TiO2: defect Physics without defects. Scientific Reports, 2016, 6, 28871.	3.3	48
21	Positron Binding Properties of Glycine and Its Aqueous Complexes. Journal of Physical Chemistry A, 2016, 120, 4037-4042.	2.5	14
22	Phonon Properties of Few-Layer Crystals of Quasi-One-Dimensional ZrS₃ and ZrSe₃. Journal of Physical Chemistry C, 2016, 120, 4653-4659.	3.1	41
23	Term rules for simple metal clusters. Scientific Reports, 2015, 5, 15760.	3.3	4
24	Pairwise chemical interactions of charged transition-metal impurities in insulators. Physical Review B, 2014, 90, .	3.2	2
25	Schottky Barrier Formation and Strain at the (011)<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>GdN</mml:mi><mml:mo>/</mml:mo><mml:mi>GaN</mml:mi></mml:mrow></mml:math>Inte from First Principles. Physical Review Applied, 2014, 2, .	3.8	8
26	Direct dâ€"d interactions among transition metal impurities in IIIâ€"V semiconductors. Applied Physics Express, 2014, 7, 023004.	2.4	3
27	Molecular Motion Induced by Multivibronic Excitation on Semiconductor Surface. Journal of Physical Chemistry C, 2014, 118, 1554-1559.	3.1	5
28	Control of defect binding and magnetic interaction energies in dilute magnetic semiconductors by charge state manipulation. Journal of Applied Physics, 2014, 115, 012008.	2.5	9
29	Magnetic Properties and Stability of Quasi-One-Dimensional Cr Chains Embedded in (Zn,Cr)Te. Applied Physics Express, 2013, 6, 073006.	2.4	2
30	Interfacial Stress and Thermal Expansion Effects for PL Spectra in AlGaNâˆ•GaN MQW. AIP Conference Proceedings, 2011, , .	0.4	0
31	Multiple exchange interactions induced by Jahn-Teller distortions in dilute magnetic semiconductors. Physical Review B, 2011, 84, .	3.2	5
32	Theory of defect complexes in insulators. Physical Review B, 2010, 82, .	3.2	8
33	Oxidation numbers as Social Security Numbers: Are they predictive or postdictive?. Nature Precedings, 2009, , .	0.1	2
34	Electronic structure, donor and acceptor transitions, and magnetism of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>3</mml:mn><mml:mi>d</mml:mi></mml:mrow></mml:math>impurities in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>In</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub ZnO. Physical Review B, 2009, 79, .	3.2	104
35	Charge self-regulation upon changing the oxidation state of transition metals in insulators. Nature, 2008, 453, 763-766.	27.8	241
36	Relative stability, electronic structure, and magnetism of MnN and (Ga,Mn)N alloys. Physical Review B, 2008, 78, .	3.2	39

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37	Control of Ferromagnetism via Electron Doping in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>In</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi ... <mml:mo><mml:mi>Cr</mml:mi></mml:math ...	7.8	70
38	Magnetic interactions of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Cr</mml:mi><mml:mtext>â^'</mml:mtext><mml:mi>Cr</mml:mi></mml:mrow></mml:math>an ... xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Co</mml:mi><mml:mtext>â^'</mml:mtext><mml:mi>Co</mml:mi></mml:mrow></mml:math>i ... pairs in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>ZnO</mml:mi></mml:mrow></mml:math>within. Physical Revie	3.2	139
39	Structural and magnetic properties of (Ga,Mn)N from first principles. Physical Review B, 2007, 75, .	3.2	29
40	Impurity Clustering and Ferromagnetic Interactions that are not Carrier Induced in Dilute Magnetic Semiconductors: The Case ofCu2Oâˆ¶Co. Physical Review Letters, 2007, 99, 167203.	7.8	43
41	Origins of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi></mml:math>-type nature and cation deficiency in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">Cu</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">O</mml:mi></mml:mrow></mml:math>and related materials. Physical Review B, 2007, 76, .	3.2	456
42	Effects of Mn clustering on ferromagnetism in (Ga,Mn)As. Physica B: Condensed Matter, 2006, 376-377, 643-646.	2.7	4
43	A multiscale study of ferromagnetism in clustered (Ga,Mn)N. Journal of Physics Condensed Matter, 2006, 18, 1561-1567.	1.8	12
44	Ferromagnetism and its evolution during long-term annealing in (Ga,Mn)As. Physical Review B, 2006, 74, .	3.2	10
45	Diffusion and clustering of substitutional Mn in (Ga,Mn)As. Applied Physics Letters, 2006, 89, 012505.	3.3	25
46	High Curie temperatures in (Ga,Mn)N from Mn clustering. Applied Physics Letters, 2006, 88, 122501.	3.3	37
47	Clustering of Mn in (Ga,Mn)As. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1398-1401.	2.3	14
48	Electronic and magnetic properties of substitutional Mn clusters in (Ga,Mn)As. Physical Review B, 2005, 72, .	3.2	57
49	Intrinsic hole localization mechanism in magnetic semiconductors. Journal of Physics Condensed Matter, 2004, 16, L457-L462.	1.8	64
50	Spontaneous magnetization of aluminum nanowires deposited on the NaCl(100) surface. Physical Review B, 2002, 66, .	3.2	31
51	Electronic structure and prediction of magnetism in metallic nanowires. Journal of Magnetism and Magnetic Materials, 2002, 249, 193-199.	2.3	16
52	The quest for dilute ferromagnetism in semiconductors: Guides and misguides by theory. Physics Magazine, 0, 3, .	0.1	200
53	Electronic Structures of Group IIIâ€"V Element Haeckelite Compounds: A Novel Family of Semiconductors, Dirac Semimetals, and Topological Insulators. Advanced Functional Materials, 0, , 2110930.	14.9	3