Assocâ€Prof Hannes Raebiger

List of Publications by Year
in descending order

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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	p-type nature and cation deficiency in Cu2O and related materials. Physical Review B, 2007, 76, .	3.2	456
2	Charge self-regulation upon changing the oxidation state of transition metals in insulators. Nature, 2008, 453, 763-766.	27.8	241
3	The quest for dilute ferromagnetism in semiconductors: Guides and misguides by theory. Physics Magazine, 0, 3.	0.1	200
4	Magnetic interactions of Cr–Cr pairs in Co–Co pairs in	3.2	138
5	within. Physical Review	3.2	104
6	Control of Ferromagnetism via Electron Doping in Physical Review Letters, 2008, 101, 027203.	7.8	70
7	Intrinsic hole localization mechanism in magnetic semiconductors. Journal of Physics Condensed Matter, 2004, 16, L457-L462.	1.8	64
8	Defect-Induced Vibration Modes of -Irradiated Physical Review Applied, 2017, 7, .	3.8	58
9	Electronic and magnetic properties of substitutional Mn clusters in (Ga,Mn)As. Physical Review B, 2005, 72, .	3.2	57
10	Charge storage in oxygen deficient phases of TiO2: defect Physics without defects. Scientific Reports, 2016, 6, 28871.	3.3	48
11	Impurity Clustering and Ferromagnetic Interactions that are not Carrier Induced in Dilute Magnetic Semiconductors: The Case ofCu2O–Co. Physical Review Letters, 2007, 99, 167203.	7.8	43
12	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
13	Relative stability, electronic structure, and magnetism of MnN and (Ga,Mn)N alloys. Physical Review B, 2008, 78, .	3.2	39
14	High Curie temperatures in (Ga,Mn)N from Mn clustering. Applied Physics Letters, 2006, 88, 122501.	3.3	37
15	Electronic and magnetic properties of carbide MXenes–the role of electron correlations. Materials Today Advances, 2021, 9, 100118.	5.2	35
16	Spontaneous magnetization of aluminum nanowires deposited on the NaCl(100) surface. Physical Review B, 2002, 66, .	3.2	31
17	Structural and magnetic properties of (Ga,Mn)N from first principles. Physical Review B, 2007, 75, .	3.2	29
18	Diffusion and clustering of substitutional Mn in (Ga,Mn)As. Applied Physics Letters, 2006, 89, 012505.	3.3	25

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19	Electronic structure and prediction of magnetism in metallic nanowires. Journal of Magnetism and Magnetic Materials, 2002, 249, 193-199.	2.3	16
20	Clustering of Mn in (Ga,Mn)As. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1398-1401.	2.3	14
21	Positron Binding Properties of Glycine and Its Aqueous Complexes. Journal of Physical Chemistry A, 2016, 120, 4037-4042.	2.5	14
22	MXene Phase with C₃ Structure Unit: A Family of 2D Electrides. Advanced Functional Materials, 2021, 31, 2100009.	14.9	13
23	A multiscale study of ferromagnetism in clustered (Ga,Mn)N. Journal of Physics Condensed Matter, 2006, 18, 1561-1567.	1.8	12
24	Ferromagnetism and its evolution during long-term annealing in (Ga,Mn)As. Physical Review B, 2006, 74, .	3.2	10
25	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
26	Theory of defect complexes in insulators. Physical Review B, 2010, 82, .	3.2	8
27	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>Inter from First Principles. Physical Review Applied, 2014, 2, .	3.8	8
28	Critical metal-insulator transition due to nuclear quantum effects in Mn-doped GaAs. Physical Review B, 2016, 94, .	3.2	7
29	Control of hole localization in magnetic semiconductors by axial strain. Physical Review Materials, 2018, 2, .	2.4	7
30	Core Electron Topologies in Chemical Compounds: Case Study of Carbon versus Silicon. Angewandte Chemie, 2018, 130, 7130-7136.	2.0	6
31	Core Electron Topologies in Chemical Compounds: Case Study of Carbon versus Silicon. Angewandte Chemie - International Edition, 2018, 57, 7012-7018.	13.8	6
32	Carrier mediated ferromagnetism in Ga₂O₃:Cr. Applied Physics Express, 2020, 13, 021002.	2.4	6
33	Multiple exchange interactions induced by Jahn-Teller distortions in dilute magnetic semiconductors. Physical Review B, 2011, 84, .	3.2	5
34	Molecular Motion Induced by Multivibronic Excitation on Semiconductor Surface. Journal of Physical Chemistry C, 2014, 118, 1554-1559.	3.1	5
35	Effects of Mn clustering on ferromagnetism in (Ga,Mn)As. Physica B: Condensed Matter, 2006, 376-377, 643-646.	2.7	4
36	Term rules for simple metal clusters. Scientific Reports, 2015, 5, 15760.	3.3	4

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37	Modulation of the optical absorption edge of Îµ- and Î²â€‰-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
38	Direct dâ€“d interactions among transition metal impurities in IIIâ€“V semiconductors. Applied Physics Express, 2014, 7, 023004.	2.4	3
39	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
40	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
41	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
42	Oxidation numbers as Social Security Numbers: Are they predictive or postdictive?. Nature Precedings, 2009, , .	0.1	2
43	Magnetic Properties and Stability of Quasi-One-Dimensional Cr Chains Embedded in (Zn,Cr)Te. Applied Physics Express, 2013, 6, 073006.	2.4	2
44	Pairwise chemical interactions of charged transition-metal impurities in insulators. Physical Review B, 2014, 90, .	3.2	2
45	First principles methods for defects: state-of-the-art and emerging approaches. , 2019, , 289-343.		2
46	Electronic mechanism for resistive switching in metal/insulator/metal nanodevices. Journal Physics D: Applied Physics, 2020, 53, 295302.	2.8	1
47	Strain Engineering to Release Trapped Hole Carriers in p-Type Haeckelite GaN. ACS Applied Electronic Materials, 2021, 3, 5257-5264.	4.3	1
48	Interfacial Stress and Thermal Expansion Effects for PL Spectra in AlGaNâ•GaN MQW. AIP Conference Proceedings, 2011, , .	0.4	0
49	Frontispiz: Core Electron Topologies in Chemical Compounds: Case Study of Carbon versus Silicon. Angewandte Chemie, 2018, 130, .	2.0	0
50	Frontispiece: Core Electron Topologies in Chemical Compounds: Case Study of Carbon versus Silicon. Angewandte Chemie - International Edition, 2018, 57, .	13.8	0
51	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
52	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
53	2D Electrides: MXene Phase with C₃ Structure Unit: A Family of 2D Electrides (Adv. Funct.) Tj ETQq1 1 0.784314 rgBT /O	14.9	0