Alex M Ganose

List of Publications by Year
in descending order

49 papers	3,579 citations	185998 28 h-index	223531 46 g-index
62 all docs	62 docs citations	62 times ranked	4895 citing authors

#	Article	IF	Citations
1	Defect Tolerance to Intolerance in the Vacancy-Ordered Double Perovskite Semiconductors Cs₂SnI₆ and Cs₂TeI₆. Journal of the American Chemical Society, 2016, 138, 8453-8464.	6.6	415
2	Beyond methylammonium lead iodide: prospects for the emergent field of ns²containing solar absorbers. Chemical Communications, 2017, 53, 20-44.	2.2	357
3	Interplay of Orbital and Relativistic Effects in Bismuth Oxyhalides: BiOF, BiOCl, BiOBr, and BiOI. Chemistry of Materials, 2016, 28, 1980-1984.	3.2	291
4	sumo: Command-line tools for plotting and analysis of periodic ab initio calculations. Journal of Open Source Software, 2018, 3, 717.	2.0	270
5	Efficient calculation of carrier scattering rates from first principles. Nature Communications, 2021, 12, 2222.	5.8	205
6	Band gap and work function tailoring of SnO₂for improved transparent conducting ability in photovoltaics. Journal of Materials Chemistry C, 2016, 4, 1467-1475.	2.7	189
7	Perspectives and Design Principles of Vacancy-Ordered Double Perovskite Halide Semiconductors. Chemistry of Materials, 2019, 31, 1184-1195.	3.2	158
8	Relativistic electronic structure and band alignment of BiSI and BiSeI: candidate photovoltaic materials. Journal of Materials Chemistry A, 2016, 4, 2060-2068.	5.2	127
9	(CH₃NH₃)₂Pb(SCN)₂I₂: A More Stable Structural Motif for Hybrid Halide Photovoltaics?. Journal of Physical Chemistry Letters, 2015, 6, 4594-4598.	2.1	117
10	Tolerance Factor and Cooperative Tilting Effects in Vacancy-Ordered Double Perovskite Halides. Chemistry of Materials, 2018, 30, 3909-3919.	3.2	105
11	Anharmonicity and Octahedral Tilting in Hybrid Vacancy-Ordered Double Perovskites. Chemistry of Materials, 2018, 30, 472-483.	3.2	104
12	Exploiting Excited-State Aromaticity To Design Highly Stable Singlet Fission Materials. Journal of the American Chemical Society, 2019, 141, 13867-13876.	6.6	104
13	Benchmarking materials property prediction methods: the Matbench test set and Automatminer reference algorithm. Npj Computational Materials, 2020, 6, .	3.5	96
14	Anion Distribution, Structural Distortion, and Symmetry-Driven Optical Band Gap Bowing in Mixed Halide Cs₂SnX₆ Vacancy Ordered Double Perovskites. Chemistry of Materials, 2019, 31, 9430-9444.	3.2	83
15	Probing the chemical structure of monolayer covalent-organic frameworks grown via Schiff-base condensation reactions. Chemical Communications, 2016, 52, 9941-9944.	2.2	78
16	First-principles insights into tin-based two-dimensional hybrid halide perovskites for photovoltaics. Journal of Materials Chemistry A, 2018, 6, 5652-5660.	5.2	71
17	Defect Engineering of Earth-Abundant Solar Absorbers BiSI and BiSeI. Chemistry of Materials, 2018, 30, 3827-3835.	3.2	68
18	Stability of the M2 phase of vanadium dioxide induced by coherent epitaxial strain. Physical Review B, 2016, 94, .	1.1	62

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19	Antiferromagnetism atT>500Kin the layered hexagonal ruthenateSrRu2O6. Physical Review B, 2015, 92, .	1.1	43
20	Electronic and defect properties of (CH₃NH₃)₂Pb(SCN)₂I₂analogues for photovoltaic applications. Journal of Materials Chemistry A, 2017, 5, 7845-7853.	5.2	43
21	An assessment of silver copper sulfides for photovoltaic applications: theoretical and experimental insights. Journal of Materials Chemistry A, 2016, 4, 12648-12657.	5.2	42
22	Compromise between band structure and phonon scattering in efficient n-Mg3Sb2-Bi thermoelectrics. Materials Today Physics, 2021, 18, 100362.	2.9	41
23	Narrow-band anisotropic electronic structure of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>ReS</mml:mi><mml:mn>2</mml:mn></mml:msub></m Physical Review B, 2017, 96, .	3.7	39
24	Experimental validation of high thermoelectric performance in RECuZnP2 predicted by high-throughput DFT calculations. Materials Horizons, 2021, 8, 209-215.	6.4	38
25	Galore: Broadening and weighting for simulation of photoelectron spectroscopy. Journal of Open Source Software, 2018, 3, 773.	2.0	36
26	Exploring the PbSâ€“Bi₂S₃ Series for Next Generation Energy Conversion Materials. Chemistry of Materials, 2017, 29, 5156-5167.	3.2	32
27	Hybrid Organicâ€“Inorganic Coordination Complexes as Tunable Optical Response Materials. Inorganic Chemistry, 2016, 55, 3393-3400.	1.9	31
28	Benchmarking Coordination Number Prediction Algorithms on Inorganic Crystal Structures. Inorganic Chemistry, 2021, 60, 1590-1603.	1.9	31
29	Correlated Polyhedral Rotations in the Absence of Polarons during Electrochemical Insertion of Lithium in ReO₃. ACS Energy Letters, 2018, 3, 2513-2519.	8.8	30
30	Robocrystallographer: automated crystal structure text descriptions and analysis. MRS Communications, 2019, 9, 874-881.	0.8	30
31	Computational discovery of promising new n-type dopable ABX Zintl thermoelectric materials. Materials Horizons, 2020, 7, 1809-1818.	6.4	30
32	Assessing the limitations of transparent conducting oxides as thermoelectrics. Journal of Materials Chemistry A, 2020, 8, 11948-11957.	5.2	28
33	Lone pair driven anisotropy in antimony chalcogenide semiconductors. Physical Chemistry Chemical Physics, 2022, 24, 7195-7202.	1.3	27
34	IFermi: A python library for Fermi surface generation and analysis. Journal of Open Source Software, 2021, 6, 3089.	2.0	26
35	High Thermoelectric Performance and Defect Energetics of Multipocketed Full Heusler Compounds. Physical Review Applied, 2020, 14, .	1.5	25
36	Two-dimensional eclipsed arrangement hybrid perovskites for tunable energy level alignments and photovoltaics. Journal of Materials Chemistry C, 2019, 7, 5139-5147.	2.7	22

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37	Local corrugation and persistent charge density wave in ZrTe3 with Ni intercalation. Physical Review B, 2018, 97, .	1.1	16
38	Enumeration as a Tool for Structure Solution: A Materials Genomic Approach to Solving the Cation-Ordered Structure of Na₃V₂(PO₄)₂F₃. Chemistry of Materials, 2020, 32, 8981-8992.	3.2	14
39	BaBi₂O₆: A Promising n-Type Thermoelectric Oxide with the PbSb₂O₆Crystal Structure. Chemistry of Materials, 2021, 33, 7441-7456.	3.2	11
40	Insights into the electronic structure of OsO2 using soft and hard x-ray photoelectron spectroscopy in combination with density functional theory. Physical Review Materials, 2019, 3, .	0.9	9
41	Electroactive Nanoporous Metal Oxides and Chalcogenides by Chemical Design. Chemistry of Materials, 2017, 29, 3663-3670.	3.2	8
42	Band gap opening from displacive instabilities in layered covalent-organic frameworks. Journal of Materials Chemistry A, 2022, 10, 13500-13507.	5.2	7
43	Influence of One Specific Carbonâ€“Carbon Bond on the Quality, Stability, and Photovoltaic Performance of Hybrid Organicâ€“Inorganic Bismuth Iodide Materials. ACS Applied Energy Materials, 2019, 2, 1579-1587.	2.5	6
44	Transition Metal Migration Can Facilitate Ionic Diffusion in Defect Garnet-Based Intercalation Electrodes. ACS Energy Letters, 2020, 5, 1448-1455.	8.8	5
45	Vacancy-Ordered Double Perovskites. Springer Theses, 2020, , 87-106.	0.0	0
46	Pseudohalide Perovskite Absorbers. Springer Theses, 2020, , 65-85.	0.0	0
47	Review: Perovskite Photovoltaics. Springer Theses, 2020, , 53-63.	0.0	0
48	Photovoltaics. Springer Theses, 2020, , 3-20.	0.0	0
49	Bismuth Chalcoiodides. Springer Theses, 2020, , 117-138.	0.0	0