

Brenden Ortiz

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3033864/publications.pdf>

Version: 2024-02-01

59
papers

4,863
citations

117625

34
h-index

155660

55
g-index

59
all docs

59
docs citations

59
times ranked

2438
citing authors

#	ARTICLE	IF	CITATIONS
1	https://doi.org/10.1038/s41567-019-0600-3 New kagome prototype materials: discovery of ZrV_3 and CsV_3Sb_5 . Physical Review Materials, 2019, 3, .	7.8	468
2	Unconventional chiral charge order in kagome superconductor KV_3Sb_5 . Nature Materials, 2021, 20, 1353-1357.	2.4	398
3	Giant, unconventional anomalous Hall effect in the metallic frustrated magnet candidate, KV_3Sb_5 . Science Advances, 2020, 6, eabb6003.	10.3	295
4	Superconductivity in the kagome metal KV_3Sb_5 . Physical Review Materials, 2021, 5, .	2.4	280
5	Cascade of correlated electron states in the kagome superconductor CsV_3Sb_5 . Nature, 2021, 599, 216-221.	27.8	251
6	Material descriptors for predicting thermoelectric performance. Energy and Environmental Science, 2015, 8, 983-994.	30.8	241
7	A practical field guide to thermoelectrics: Fundamentals, synthesis, and characterization. Applied Physics Reviews, 2018, 5, 021303.	11.3	223
8	Twofold van Hove singularity and origin of charge order in topological kagome superconductor CsV_3Sb_5 . Nature Physics, 2022, 18, 301-308.	16.7	176
9	Fermi Surface Mapping and the Nature of Charge-Density-Wave Order in the Kagome Superconductor CsV_3Sb_5 . Physical Review X, 2021, 11, .	8.9	122
10	Pressure-induced double superconducting domes and charge instability in the kagome metal KV_3Sb_5 . Physical Review B, 2021, 103, .	3.2	115
11	Intrinsic nature of chiral charge order in the kagome superconductor KV_3Sb_5 . Physical Review B, 2021, 104, .	3.2	108
12	Rotation symmetry breaking in the normal state of a kagome superconductor KV_3Sb_5 . Nature Physics, 2022, 18, 265-270.	16.7	102
13	Absence of local moments in the kagome metal KV_3Sb_5 as determined by muon spin spectroscopy. Journal of Physics Condensed Matter, 2021, 33, 235801.	1.8	100
14	Nodeless superconductivity in the kagome metal CsV_3Sb_5 . Science China: Physics, Mechanics and Astronomy, 2021, 64, 1.	5.1	100
15	TE Design Lab: A virtual laboratory for thermoelectric material design. Computational Materials Science, 2016, 112, 368-376.	3.0	98
16	Capturing Anharmonicity in a Lattice Thermal Conductivity Model for High-Throughput Predictions. Chemistry of Materials, 2017, 29, 2494-2501.	6.7	88
17	Rich nature of Van Hove singularities in Kagome superconductor CsV_3Sb_5 . Nature Communications, 2022, 13, 2220.	12.8	87

#	ARTICLE	IF	CITATIONS
19	Investigation of n-type doping strategies for Mg ₃ Sb ₂ . Journal of Materials Chemistry A, 2018, 6, 13806-13815.	10.3	80
20	Coherent phonon spectroscopy and interlayer modulation of charge density wave order in the kagome metal CsV_3Sb_5 . Physical Review Materials, 2021, 5, .	2.4	80
21	Superconductivity in the kagome metal CsV_3Sb_5 . Physical Review Materials, 2022, 6, .	2.4	74
22	Thermoelectric Performance and Defect Chemistry in n-Type Zintl KGaSb ₄ . Chemistry of Materials, 2017, 29, 4523-4534.	6.7	59
23	Optical detection of the density-wave instability in the kagome metal KV3Sb5. Npj Quantum Materials, 2022, 7, .	5.2	57
24	Realizing Kagome Band Structure in Two-Dimensional Kagome Surface States of V_6Sb_6 .		

#	ARTICLE	IF	CITATIONS
37	Towards the high-throughput synthesis of bulk materials: thermoelectric PbTeâ€“PbSeâ€“SnTeâ€“SnSe alloys. Molecular Systems Design and Engineering, 2019, 4, 407-420.	3.4	28
38	Carrier density control in Cu ₂ HgGeTe ₄ and discovery of Hg ₂ GeTe ₄ viaphase boundary mapping. Journal of Materials Chemistry A, 2019, 7, 621-631.	10.3	27
39	Experimental and computational phase boundary mapping of Co ₄ Sn ₆ Te ₆ . Journal of Materials Chemistry A, 2018, 6, 24175-24185.	10.3	26
40	Synthesis, Structure, and Thermoelectric Properties of \pm -Zn ₃ Sb ₂ and Comparison to \pm -Zn ₁₃ Sb ₁₀ . Chemistry of Materials, 2017, 29, 5249-5258.	6.7	24
41	Strain-sensitive superconductivity in the kagome metals \pm -Zn ₃ Sb ₂ and \pm -Zn ₁₃ Sb ₁₀ . Physical Review B, 2021, 104, .	3.2	24
42	Development of ZnSiP ₂ for Si-Based Tandem Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 17-21.	2.5	19
43	Optical study of \pm -Zn ₃ Sb ₂ : Multiple density-wave gaps and phonon anomalies. Physical Review B, 2022, 105, .	3.2	15
44	Solubility limits in quaternary SnTe-based alloys. RSC Advances, 2017, 7, 24747-24753.	3.6	14
45	Prototype latent heat storage system with aluminum-silicon as a phase change material and a Stirling engine for electricity generation. Energy Conversion and Management, 2019, 199, 111992.	9.2	14
46	Using resonant energy X-ray diffraction to extract chemical order parameters in ternary semiconductors. Journal of Materials Chemistry C, 2020, 8, 4350-4356.	5.5	13
47	Evolution of superconductivity and charge order in pressurized RbV ₃ Sb ₅ . Chinese Physics B, 2022, 31, 017404.	1.4	13
48	Electronic states dressed by an out-of-plane supermodulation in the quasi-two-dimensional kagome superconductor \pm -Zn ₃ Sb ₂ . Physical Review B, 2022, 105, .	3.2	13
49	Superconductivity and charge order in the kagome metal \pm -Zn ₃ Sb ₂ . Physical Review Materials, 2022, 6, .	2.4	13
50	Discovery of n-Type Zintl Phases RbAlSb ₄ , RbGaSb ₄ , CsAlSb ₄ , and CsGaSb ₄ . ACS Applied Energy Materials, 2020, 3, 2182-2191.	5.1	11
51	Van Vleck excitons in \pm -Zn ₃ Sb ₂ . Physical Review B, 2020, 102, .	3.2	11
52	Large Area Atomically Flat Surfaces via Exfoliation of Bulk Bi ₂ Se ₃ Single Crystals. Chemistry of Materials, 2017, 29, 8472-8477.	6.7	8
53	Single crystal growth and phase stability of photovoltaic grade ZnSiP ₂ by flux technique. , 2015, , .		5
54	Controlling thermoelectric transport via native defects in the diamond-like semiconductors Cu ₂ HgGeTe ₄ and Hg ₂ GeTe ₄ . Journal of Materials Chemistry A, 0, , .	10.3	4

#	ARTICLE	IF	CITATIONS
55	Understanding Cu incorporation in the CuIn_2S_4 structure using resonant x-ray diffraction. Physical Review Materials, 2021, 5, .	2.4	3
56	Surface-induced orbital-selective band reconstruction in kagome superconductor CsV_3Sb_5 . Chinese Physics B, 2022, 31, 057403.	1.4	3
57	Energy conversion properties of ZnSiP_2 , a lattice-matched material for silicon-based tandem photovoltaics. , 2016, , .		2
58	Anomalous electronic properties in layered, disordered ZnVSb . Physical Review Materials, 2021, 5, .	2.4	2
59	Single crystalline substrates for III- V growth via exfoliation of bulk single crystals. , 2017, , .		1