Brenden Ortiz

List of Publications by Year
in descending order

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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	Evolution of superconductivity and charge order in pressurized RbV₃Sb₅. Chinese Physics B, 2022, 31, 017404.	1.4	13
2	Twofold van Hove singularity and origin of charge order in topological kagome superconductor CsV3Sb5. Nature Physics, 2022, 18, 301-308.	16.7	176
3	Rotation symmetry breaking in the normal state of a kagome superconductor KV3Sb5. Nature Physics, 2022, 18, 265-270.	16.7	102
4	Surface-induced orbital-selective band reconstruction in kagome superconductor CsV₃Sb₅. Chinese Physics B, 2022, 31, 057403.	1.4	3
5	Optical detection of the density-wave instability in the kagome metal KV3Sb5. Npj Quantum Materials, 2022, 7, .	5.2	57
6	Role of Sb in the superconducting kagome metal CsV$_3$Sb$_5$ revealed by its anisotropic compression. SciPost Physics, 2022, 12, .	4.9	29
7	Charge density wave order in the kagome metal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>A</mml:mi><mml:mrow><mml:msub><mml:mi mathvariant="normal">V</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi>Sb</mml:mi><mml:mn>5</mml:mn></mml:msub></mml:mrow></mml:math		

#	Article	IF	Citations
19	Nodeless superconductivity in the kagome metal CsV3Sb5. Science China: Physics, Mechanics and Astronomy, 2021, 64, 1.	5.1	100
20	Low-energy optical properties of the nonmagnetic kagome metal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>CsV</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2021, 104, .	3.2	42
21	Cascade of correlated electron states in the kagome superconductor CsV3Sb5. Nature, 2021, 599, 216-221.	27.8	251
22	Understanding Cu incorporation in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cu</mml:mi><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> structure using resonant x-ray diffraction. Physical Review Materials, 2021, 5, .	2.4	3
23	Geometry of the charge density wave in the kagome metal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>A</mml:mi><mml:msub><mml:mrow><mml:mi mathvariant="normal">V</mml:mi></mml:mrow><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mrow><mml:mi>Sb</mml:mi> Physical Review B, 2021, 104, .	3.2	47
24	Coherent phonon spectroscopy and interlayer modulation of charge density wave order in the kagome metal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>CsV</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review Materials, 2021, 5, .	2.4	80
25	Fermi Surface Mapping and the Nature of Charge-Density-Wave Order in the Kagome Superconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>CsV</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn> Physical Review X, 2021, 11, .	8.9	122
26	Strain-sensitive superconductivity in the kagome metals <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>KV</mml:mi><mml:mn>3</mml:mn></mml:msub> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Cs</mml:mi><mml:msub><mml:mi mathvariant="normal">V</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi>Sb</mml:mi><mml:mn>5</mml:mn></mml:msub> Physical Review B, 2021, 104, .	3.2	24
27	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>R</mml:mi><mml:msub><mml:mrow><mml:mi mathvariant="normal">V</mml:mi></mml:mrow><mml:mrow><mml:mn>6</mml:mn></mml:mrow></mml:msub><mml:msub><mml		

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37	New kagome prototype materials: discovery of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>KV</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>, and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>CsV</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review Materials, 2019, 3, .	2.4	398
38	High Seebeck Coefficient and Unusually Low Thermal Conductivity Near Ambient Temperatures in Layered Compound Yb_{2â€“x}Eu_xCdSb₂. Chemistry of Materials, 2018, 30, 484-493.	6.7	45
39	Ultralow Thermal Conductivity in Diamond-Like Semiconductors: Selective Scattering of Phonons from Antisite Defects. Chemistry of Materials, 2018, 30, 3395-3409.	6.7	28
40	Experimental and computational phase boundary mapping of Co₄Sn₆Te₆. Journal of Materials Chemistry A, 2018, 6, 24175-24185.	10.3	26
41	Exciton photoluminescence and benign defect complex formation in zinc tin nitride. Materials Horizons, 2018, 5, 823-830.	12.2	41
42	A practical field guide to thermoelectrics: Fundamentals, synthesis, and characterization. Applied Physics Reviews, 2018, 5, 021303.	11.3	223
43	Investigation of n-type doping strategies for Mg₃Sb₂. Journal of Materials Chemistry A, 2018, 6, 13806-13815.	10.3	80
44	Capturing Anharmonicity in a Lattice Thermal Conductivity Model for High-Throughput Predictions. Chemistry of Materials, 2017, 29, 2494-2501.	6.7	88
45	Potential for high thermoelectric performance in n-type Zintl compounds: a case study of Ba doped KAlSb₄. Journal of Materials Chemistry A, 2017, 5, 4036-4046.	10.3	55
46	Thermoelectric Performance and Defect Chemistry in n-Type Zintl KGaSb₄. Chemistry of Materials, 2017, 29, 4523-4534.	6.7	59
47	Solubility limits in quaternary SnTe-based alloys. RSC Advances, 2017, 7, 24747-24753.	3.6	14
48	Large Area Atomically Flat Surfaces via Exfoliation of Bulk Bi₂Se₃ Single Crystals. Chemistry of Materials, 2017, 29, 8472-8477.	6.7	8
49	Synthesis, Structure, and Thermoelectric Properties of Î±-Zn₃Sb₂ and Comparison to Î²-Zn₁₃Sb₁₀. Chemistry of Materials, 2017, 29, 5249-5258.	6.7	24
50	Single crystalline substrates for III- V growth via exfoliation of bulk single crystals. , 2017, , .		1
51	Energy conversion properties of ZnSiP<inf>2</inf>, a lattice-matched material for silicon-based tandem photovoltaics. , 2016, , .		2
52	Thermoelectric properties of bromine filled CoSb₃ skutterudite. Journal of Materials Chemistry A, 2016, 4, 8444-8450.	10.3	36
53	TE Design Lab: A virtual laboratory for thermoelectric material design. Computational Materials Science, 2016, 112, 368-376.	3.0	98
54	Solar energy conversion properties and defect physics of ZnSiP₂. Energy and Environmental Science, 2016, 9, 1031-1041.	30.8	49

#	Article	IF	Citations
55	Single crystal growth and phase stability of photovoltaic grade ZnSiP2 by flux technique. , 2015, , .		5
56	Development of ZnSiP$_{mathbf 2}$ for Si-Based Tandem Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 17-21.	2.5	19
57	Effect of extended strain fields on point defect phonon scattering in thermoelectric materials. Physical Chemistry Chemical Physics, 2015, 17, 19410-19423.	2.8	55
58	Material descriptors for predicting thermoelectric performance. Energy and Environmental Science, 2015, 8, 983-994.	30.8	241
59	Controlling thermoelectric transport via native defects in the diamond-like semiconductors Cu2HgGeTe4 and Hg2GeTe4. Journal of Materials Chemistry A, 0, , .	10.3	4