Jan-Hendrik PÃ¶hls

List of Publications by Year
in descending order

Version: 2024-02-01

16	764	687363 13	940533 16
papers	citations	h-index	g-index

17	17	17	1139
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Understanding thermoelectric properties from high-throughput calculations: trends, insights, and comparisons with experiment. Journal of Materials Chemistry C, 2016, 4, 4414-4426.	5.5	193
2	Achieving zT > 1 in Inexpensive Zintl Phase Ca₉Zn₄₊_xSb₉ by Phase Boundary Mapping. Advanced Functional Materials, 2017, 27, 1606361.	14.9	129
3	Computational and experimental investigation of TmAgTe₂and XYZ₂compounds, a new group of thermoelectric materials identified by first-principles high-throughput screening. Journal of Materials Chemistry C, 2015, 3, 10554-10565.	5.5	99
4	Metal phosphides as potential thermoelectric materials. Journal of Materials Chemistry C, 2017, 5, 12441-12456.	5.5	53
5	YCuTe₂: a member of a new class of thermoelectric materials with CuTe₄-based layered structure. Journal of Materials Chemistry A, 2016, 4, 2461-2472.	10.3	52
6	Experimental validation of high thermoelectric performance in RECuZnP2 predicted by high-throughput DFT calculations. Materials Horizons, 2021, 8, 209-215.	12.2	38
7	Mechanisms of electron-phonon coupling unraveled in momentum and time: The case of soft phonons in TiSe ₂. Science Advances, 2021, 7, .	10.3	38
8	Time- and momentum-resolved phonon population dynamics with ultrafast electron diffuse scattering. Physical Review B, 2019, 100, .	3.2	33
9	Origins of ultralow thermal conductivity in 1-2-1-4 quaternary selenides. Journal of Materials Chemistry A, 2019, 7, 2589-2596.	10.3	28
10	Direct visualization of polaron formation in the thermoelectric SnSe. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	23
11	Origins of ultralow thermal conductivity in bulk [6,6]-phenyl-C₆₁-butyric acid methyl ester (PCBM). Physical Chemistry Chemical Physics, 2016, 18, 1185-1190.	2.8	20
12	First-principles calculations and experimental studies of XYZ₂ thermoelectric compounds: detailed analysis of van der Waals interactions. Journal of Materials Chemistry A, 2018, 6, 19502-19519.	10.3	20
13	Hexagonal Double Perovskite Cs₂AgCrCl₆. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2019, 645, 323-328.	1.2	16
14	Thermoelectric properties of inverse perovskites A3TtO (Aâ€‰=â€‰Mg, Ca; Ttâ€‰=â€‰Si,) Tj ETQq0 0 0	2.5	13
15	TOSSPB: Thermoelectric optimization based on scattering-dependent single-parabolic band model. Computational Materials Science, 2022, 206, 111152.	3.0	8
16	Ultrafast Electron Scattering: Femtosecond Electron Pulses in Materials Research. , 2021, , .		0