Steven Hepplestone

List of Publications by Year
in descending order

29	329	759233	839539
papers	citations	12 h-index	18 g-index

29	29	29	495
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Computational analysis of the enhancement of photoelectrolysis using transition metal dichalcogenide heterostructures. Journal of Physics Condensed Matter, 2022, 34, 375001.	1.8	3
2	Band alignment of transition metal dichalcogenide heterostructures. Physical Review B, 2021, 103, .	3.2	25
3	ARTEMIS: Ab initio restructuring tool enabling the modelling of interface structures. Computer Physics Communications, 2020, 257, 107515.	7.5	20
4	Solvothermal synthesis of Sn₃N₄ as a high capacity sodium-ion anode: theoretical and experimental study of its storage mechanism. Journal of Materials Chemistry A, 2020, 8, 16437-16450.	10.3	4
5	Calcium-stannous oxide solid solutions for solar devices. Applied Physics Letters, 2020, 117, .	3.3	2
6	The Potential of Overlayers on Tin-based Perovskites for Water Splitting. Journal of Physical Chemistry Letters, 2020, 11, 4124-4130.	4.6	4
7	Coupling and confinement of current in thermoacoustic phased arrays. Science Advances, 2020, 6, eabb2752.	10.3	5
8	The Fundamental Mechanism Behind Colossal Permittivity in Oxides. Advanced Materials, 2019, 31, e1904746.	21.0	21
9	Colossal Permittivity: The Fundamental Mechanism Behind Colossal Permittivity in Oxides (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /O	21.0	0
10	Strain-engineered inverse charge-funnelling in layered semiconductors. Nature Communications, 2018, 9, 1652.	12.8	36
11	First principles electronic and elastic properties of fresnoite Ba₂TiSi₂O₈. Materials Research Express, 2017, 4, 125904.	1.6	5
12	First-principles structure determination of interface materials: The<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mtext>Ni</mml:mtext><mml:mi>x</mml:mi> Physical Review B, 2015, 92, .	3.2	12
13	Multi-scale Simulations of Metal-Semiconductor Nanoscale Contacts. Journal of Physics: Conference Series, 2015, 647, 012030.	0.4	2
14	Dominance of Interface Chemistry over the Bulk Properties in Determining the Electronic Structure of Epitaxial Metal/Perovskite Oxide Heterojunctions. Chemistry of Materials, 2015, 27, 4093-4098.	6.7	4
15	Effect of metal intermixing on the Schottky barriers of Mo(100)/GaAs(100) interfaces. Journal of Applied Physics, 2014, 116, 193703.	2.5	7
16	Multi-scale simulations of metal-semiconductor contacts for nano-MOSFETs. , 2014, , .		0
17	Multi-scale simulations of a Mo/n⁺â€“GaAs Schottky contact for nano-scale IIIâ€“V MOSFETs. Semiconductor Science and Technology, 2014, 29, 054003.	2.0	8
18	Transport behavior of holes in boron delta-doped diamond structures. Journal of Applied Physics, 2013, 113, .	2.5	28

#	Article	IF	Citations
19	Multi-Scale Simulation of Transport via a Mo/n+-GaAs Schottky Contact. Materials Research Society Symposia Proceedings, 2013, 1553, 1.	0.1	1
20	Lattice dynamics and thermal properties of phononic semiconductors. Physical Review B, 2011, 84, .	3.2	20
21	Phononic gaps in thin semiconductor superlattices. Journal of Applied Physics, 2010, 107, 043504.	2.5	12
22	Theory of interface scattering of phonons in superlattices. Physical Review B, 2010, 82, .	3.2	31
23	Atomic Theory Of Phononic Gaps In Nano-patterned Semiconductors. , 2009, , .		0
24	Anharmonic Lifetime of Phonons in Nanophononic Semiconductors. Materials Research Society Symposia Proceedings, 2009, 1172, 26.	0.1	0
25	Hypersonic Modes in Nanophononic Semiconductors. Physical Review Letters, 2008, 101, 105502.	7.8	33
26	Lattice dynamics of silicon nanostructures. Nanotechnology, 2006, 17, 3288-3298.	2.6	25
27	Lattice dynamics of ultrasmall silicon nanostructures. Applied Physics Letters, 2005, 87, 231906.	3.3	16
28	The lattice dynamics of rectangular silicon nanowires. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 2617-2620.	0.8	5
29	2D hybrid perovskite for light sensing. , 0, , .		0