

Sobhit Singh

List of Publications by Year in descending order

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42
papers

1,355
citations

361388

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345203

36
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all docs

43
docs citations

43
times ranked

1726
citing authors

#	ARTICLE	IF	CITATIONS
1	Pressure-induced creation and annihilation of Weyl points in $W_{0.5}T_d$. Physical Review B, 2022, 105, .	8.2	14
2	Vibrational fingerprints of ferroelectric HfO ₂ . Npj Quantum Materials, 2022, 7, .	5.2	24
3	High-temperature phonon-mediated superconductivity in monolayer Mg ₂ B ₄ C ₂ . Npj Quantum Materials, 2022, 7, .	5.2	11
4	Vibrational properties of S_{62} across the ferroelectric transition. Physical Review B, 2022, 105, .	3.2	14
5	Kinetically stabilized ferroelectricity in bulk single-crystalline HfO ₂ :Y. Nature Materials, 2021, 20, 826-832.	27.5	114
6	Tailoring the electronic structure and magnetic properties of pyrochlore Co ₂ Ti _{1-x} Ge _x O ₄ : a GGA + U ab initio study. Journal of Physics Condensed Matter, 2021, 33, 145504.	1.8	4
7	Proximate Quantum Spin Liquid on Designer Lattice. Nano Letters, 2021, 21, 2010-2017.	9.1	4
8	A new planar defect in SiGe nanopillars. Microscopy and Microanalysis, 2021, 27, 1948-1949.	0.4	0
9	Lattice dynamics and magnetic exchange interactions in $GeCo_2$ spinel with A pyrochlore lattice. Physical Review B, 2021, 104, .	3.2	7
10	MechElastic: A Python library for analysis of mechanical and elastic properties of bulk and 2D materials. Computer Physics Communications, 2021, 267, 108068.	7.5	54
11	Polarization Selectivity of Aloof-Beam Electron Energy-Loss Spectroscopy in One-Dimensional ZnO Nanorods. Physical Review Applied, 2021, 16, .	3.8	1
12	Exploring DFT+U parameter space with a Bayesian calibration assisted by Markov chain Monte Carlo sampling. Npj Computational Materials, 2021, 7, .	8.7	8
13	PyProcar: A Python library for electronic structure pre/post-processing. Computer Physics Communications, 2020, 251, 107080.	7.5	180
14	Engineering Weyl Phases and Nonlinear Hall Effects in T_{d-2} . Physical Review Letters, 2020, 125, 257603.	7.8	45
15	Stabilization of Competing Ferroelectric Phases of $MoTe_2$ Epitaxial Strain. Physical Review Letters, 2020, 125, 257603.	7.8	46
16	Topology of triple-point metals*. Chinese Physics B, 2019, 28, 077303.	1.4	25
17	Emergent Magnetic State in (111)-Oriented Quasi-Two-Dimensional Spinel Oxides. Nano Letters, 2019, 19, 8381-8387.	9.1	10
18	Low-Energy Phases of Bi Monolayer Predicted by Structure Search in Two Dimensions. Journal of Physical Chemistry Letters, 2019, 10, 7324-7332.	4.6	18

#	ARTICLE	IF	CITATIONS
19	Polar and phase domain walls with conducting interfacial states in a Weyl semimetal MoTe ₂ . Nature Communications, 2019, 10, 4211.	12.8	50
20	Surface Recombination in Ultra-Fast Carrier Dynamics of Perovskite Oxide La _{0.7} Sr _{0.3} MnO ₃ Thin Films. ACS Nano, 2019, 13, 3457-3465.	14.6	15
21	Ultra-Fast Phenomena in Perovskite Oxide La _{0.7} Sr _{0.3} MnO ₃ Thin Films. , 2019, , .		0
22	Elastic, mechanical, and thermodynamic properties of Bi-Sb binaries: Effect of spin-orbit coupling. Physical Review B, 2018, 97, .	3.2	76
23	Role of dilution on the electronic structure and magnetic ordering of spinel cobaltites. Physical Review B, 2018, 98, .	3.2	17
24	Structural, electronic, vibrational, and elastic properties of graphene/ MoS_2 bilayer heterostructures. Physical Review B, 2018, 98, .	3.2	17
25	Electrostatic potential and valence modulation in La _{0.7} Sr _{0.3} MnO ₃ thin films. Scientific Reports, 2018, 8, 14313.	3.3	8
26	Cubic phase stability, optical and magnetic properties of Cu-stabilized zirconia nanocrystals. Journal Physics D: Applied Physics, 2018, 51, 225304.	2.8	8
27	Topological phonons and thermoelectricity in triple-point metals. Physical Review Materials, 2018, 2, .	2.4	76
28	Size-dependent structural, magnetic, and optical properties of MnCo ₂ O ₄ nanocrystallites. Journal of Applied Physics, 2017, 121, .	2.5	45
29	Unusual enhancement of effective magnetic anisotropy with decreasing particle size in maghemite nanoparticles. Applied Physics Letters, 2017, 110, .	3.3	28
30	Controlling the magnetic and optical responses of a MoS_2 monolayer by lanthanide substitutional doping: a first-principles study. Physical Chemistry Chemical Physics, 2017, 19, 25555-25563.	2.8	52
31	Giant tunable Rashba spin splitting in a two-dimensional BiSb monolayer and in BiSb/AlN heterostructures. Physical Review B, 2017, 95, .	3.2	127
32	Effects of Cu doping on the electronic structure and magnetic properties of MnCo ₂ O ₄ nanostructures. Journal of Physics Condensed Matter, 2017, 29, 425803.	1.8	31
33	Design of Mg alloys: The effects of Li concentration on the structure and elastic properties in the Mg-Li binary system by first principles calculations. Journal of Alloys and Compounds, 2017, 691, 15-25.	5.5	41
34	Nature of Magnetic Ordering in Cobalt-Based Spinel. , 2017, , .		3
35	A core-shell-surface layer model to explain the size dependence of effective magnetic anisotropy in magnetic nanoparticles. , 2017, , .		2
36	Investigation of novel crystal structures of Bi-Sb binaries predicted using the minima hopping method. Physical Chemistry Chemical Physics, 2016, 18, 29771-29785.	2.8	37

#	ARTICLE	IF	CITATIONS
37	Prediction and control of spin polarization in a Weyl semimetallic phase of BiSb. Physical Review B, 2016, 94, .	3.2	41
38	Synthesis, structural characterization and magnetic properties of Fe/Pt core-shell nanoparticles. Journal of Applied Physics, 2015, 117, .	2.5	15
39	The role of surface effects on the optical behavior of nanocrystalline NiO. AIP Conference Proceedings, 2013, , .	0.4	3
40	Phase evaluation and optical studies of cubic $Mn_xZr_{1-x}O_2$ and $Co_yZr_{1-y}O_2$ nanocrystals. , 2013, , .		1
41	The spin glass behaviour of disordered spinel ferrite Co_2TiO_4 . Journal of Physics C: Solid State Physics, 1987, 20, 2139-2148.	1.5	27
42	Cooperation of free- and bound-electron-phonon scatterings in Sb-doped Ge. Physical Review B, 1983, 28, 3386-3389.	3.2	1