

Bahadur Singh

List of Publications by Year in descending order

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Version: 2024-02-01

62
papers

2,945
citations

236925

25
h-index

161849

54
g-index

64
all docs

64
docs citations

64
times ranked

4080
citing authors

#	ARTICLE	IF	CITATIONS
1	Discovery of topological Weyl fermion lines and drumhead surface states in a room temperature magnet. Science, 2019, 365, 1278-1281.	12.6	374
2	Atomically thin noble metal dichalcogenide: a broadband mid-infrared semiconductor. Nature Communications, 2018, 9, 1545.	12.8	367
3	Topological quantum properties of chiral crystals. Nature Materials, 2018, 17, 978-985.	27.5	252
4	Topological Hopf and Chain Link Semimetal States and Their Application to Co_2MnSi . Physical Review Letters, 2017, 119, 156401.	7.8	183
5	Discovery of Lorentz-violating type II Weyl fermions in LaAlGe. Science Advances, 2017, 3, e1603266.	10.3	176
6	Room-temperature magnetic topological Weyl fermion and nodal line semimetal states in half-metallic Heusler Co_2TiX (X=Si, Ge, or Sn). Scientific Reports, 2016, 6, 38839.	3.3	148
7	Layer Hall effect in a 2D topological axion antiferromagnet. Nature, 2021, 595, 521-525.	27.8	136
8	Topological electronic structure and Weyl semimetal in the TlBiSe_2 class of semiconductors. Physical Review B, 2012, 86, .	3.2	135
9			

#	ARTICLE	IF	CITATIONS
19	Topological Hourglass Dirac Semimetal in the Nonpolar Phase of BiOAg_2 . Physical Review Letters, 2018, 121, 226401.	7.8	33
20	Tunable double-Weyl Fermion semimetal state in the SrSi ₂ materials class. Scientific Reports, 2018, 8, 10540.	3.3	30
21	Temperature-dependent electronic structure in a higher-order topological insulator candidate Eu_2In_2 . Physical Review B, 2020, 102, .	3.2	30
22	Observation of Effective Pseudospin Scattering in ZrSiS. Nano Letters, 2017, 17, 7213-7217.	9.1	29
23	Spin-orbit coupling driven crossover from a starfruitlike nodal semimetal to Dirac and Weyl semimetal state in CaAuAs. Physical Review B, 2018, 98, .	3.2	29
24	Magnetotransport properties of the topological nodal-line semimetal CaCdSn. Physical Review B, 2020, 102, .	3.2	29
25	Developing descriptors for CO ₂ methanation and CO ₂ reforming of CH ₄ over Al ₂ O ₃ supported Ni and low-cost Ni based alloy catalysts. Physical Chemistry Chemical Physics, 2018, 20, 15939-15950.	2.8	26
26	Exceptionally large anomalous Hall effect due to anticrossing of spin-split bands in the antiferromagnetic half-Heusler compound TbPtBi. Physical Review B, 2020, 101, .	3.2	24
27	Prediction of threefold fermions in a nearly ideal Dirac semimetal BaAgAs. Physical Review Materials, 2019, 3, .	2.4	24
28	Saddle-point Van Hove singularity and dual topological state in Pt_2Mn_2 . Physical Review B, 2019, 100, .	2.2	21
29	Topological phase transition and two-dimensional topological insulators in Ge-based thin films. Physical Review B, 2013, 88, .	3.2	19
30	Topological Hall effect in the antiferromagnetic Dirac semimetal EuAgAs. Physical Review B, 2021, 103, .	3.2	19
31	Saddle-like topological surface states on the TaT_2 .		

#	ARTICLE	IF	CITATIONS
37	Role of surface termination in realizing well-isolated topological surface states within the bulk band gap in Bi_2Te_3 . <i>Physical Review B</i> , 2016, 93, .	3.2	11
38	Magnetotransport properties of noncentrosymmetric CaAgBi single crystal. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 335701.	1.8	11
39	<i>Ab initio</i> description of the electronic structure of Bi_2Te_3 . <i>Physical Review B</i> , 2020, 101, .	3.2	11
40	Topological states in superlattices of HgTe class of materials for engineering three-dimensional flat bands. <i>Physical Review Research</i> , 2022, 4, .	3.6	11
41	Orthorhombic charge density wave on the tetragonal lattice of EuAl_4 . <i>IUCr</i> , 2022, 9, 378-385.	2.2	10
42	Topological Antiferromagnetic Van der Waals Phase in Topological Insulator/Ferromagnet Heterostructures Synthesized by a CMOS-Compatible Sputtering Technique. <i>Advanced Materials</i> , 2022, 34, e2108790.	21.0	9
43	Collective plasmonic modes in the chiral multifold fermionic material CoSi . <i>Physical Review B</i> , 2022, 105, .	3.2	9
44	Magnetically tunable Dirac and Weyl fermions in the Zintl materials family. <i>Physical Review Materials</i> , 2022, 6, .	2.4	9
45	Aspects of symmetry and topology in the charge density wave phase of $1\text{T}\text{-TiSe}_2$. <i>New Journal of Physics</i> , 2021, 23, 083037.	2.9	7
46	Anomalies in the temperature evolution of Dirac states in the topological crystalline insulator SnTe . <i>Physical Review B</i> , 2021, 104, .	3.2	7
47	Design of a Stable Heusler Alloy with Switchable Metal-Half-Metal Transition at Finite Temperature. <i>Advanced Theory and Simulations</i> , 2021, 4, 2100311.	2.8	6
48	Critical role of magnetic moments in heavy-fermion materials: Revisiting SmB_6 . <i>Physical Review B</i> , 2022, 105, .	3.2	6
49	Topological Dirac Semimetal Phase in Bismuth Based Anode Materials for Sodium-Ion Batteries. <i>Condensed Matter</i> , 2020, 5, 39.	1.8	4
50	Observation of multilayer quantum Hall effect in the charge density wave material CaCu_4 . <i>Physical Review Research</i> , 2022, 4, .	3.2	4
51	Weyl semimetal in the rare-earth hexaboride family supporting a pseudonodal surface and a giant anomalous Hall effect. <i>Physical Review B</i> , 2022, 105, .	3.2	4
52	K_2CoS_2 : A two-dimensional in-plane antiferromagnetic insulator. <i>Physical Review B</i> , 2020, 102, .	3.2	4
53	Fermi surface studies of the topologically nontrivial compound YSi . <i>Physical Review B</i> , 2021, 103, .	3.2	3
54	Topological theory of inversion-breaking charge-density-wave monolayer $1\text{T}\text{-TiSe}_2$. <i>New Journal of Physics</i> , 2021, 23, 093025.	2.9	3

#	ARTICLE	IF	CITATIONS
55	Anomalies at the Dirac Point in Graphene and Its Hole-Doped Compositions. Physical Review Letters, 2022, 128, 166401.	7.8	3
56	Cleaving plane-dependent electronic structures of transition metal diarsenides. Physical Review Research, 2021, 3, .	3.6	2
57	Weak antilocalization and Shubnikovâ€de Haas oscillations in single crystal CaCuSb. Physical Review B, 2021, 104, .	3.2	2
58	Topological phonons and electronic structure of Li ₂ BaSi class of semimetals. Journal of Physics Condensed Matter, 2022, 34, 125502.	1.8	2
59	Superconductivity in Heusler compound ScAu ₂ Al. Journal of Physics Condensed Matter, 2022, 34, 195403.	1.8	1
60	Orbital selective spin-texture in a topological insulator. AIP Conference Proceedings, 2015, , .	0.4	0
61	Spin-Texture of the Non-Trivial Surface State of Topological Insulator Sb ₂ Te ₃ . Quantum Matter, 2016, 5, 362-364.	0.2	0
62	Observation of a smoothly tunable Dirac point in $\text{Ge}_{1-x}\text{Sn}_x$. Physical Review Materials, 2022, 6, .		