

Chandra Shekhar

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3990142/publications.pdf>

Version: 2024-02-01

117
papers

8,696
citations

57758

44
h-index

43889

91
g-index

121
all docs

121
docs citations

121
times ranked

8676
citing authors

#	ARTICLE	IF	CITATIONS
1	Extremely large magnetoresistance and ultrahigh mobility in the topological Weyl semimetal candidate NbP. Nature Physics, 2015, 11, 645-649.	16.7	893
2	Giant anomalous Hall effect in a ferromagnetic kagome-lattice semimetal. Nature Physics, 2018, 14, 1125-1131.	16.7	876
3	Superconductivity in Weyl semimetal candidate MoTe2. Nature Communications, 2016, 7, 11038.	12.8	611
4	Large anomalous Hall effect driven by a nonvanishing Berry curvature in the noncolinear antiferromagnet Mn ₃ Ge. Science Advances, 2016, 2, e1501870.	10.3	561
5	Negative magnetoresistance without well-defined chirality in the Weyl semimetal TaP. Nature Communications, 2016, 7, 11615.	12.8	429
6	High-mobility band-like charge transport in a semiconducting two-dimensional metal-organic framework. Nature Materials, 2018, 17, 1027-1032.	27.5	341
7	Design of compensated ferrimagnetic Heusler alloys for giant tunable exchange bias. Nature Materials, 2015, 14, 679-684.	27.5	250
8	Experimental signatures of the mixed axial-gravitational anomaly in the Weyl semimetal NbP. Nature, 2017, 547, 324-327.	27.8	222
9	Anomalous Nernst effect beyond the magnetization scaling relation in the ferromagnetic Heusler compound Co ₂ MnGa. NPG Asia Materials, 2019, 11, .	7.9	190
10	Large Zero-Field Cooled Exchange-Bias in Bulk Mn_2PtGa . Physical Review Letters, 2013, 110, 127204.	7.8	182
11	Zero-Field Nernst Effect in a Ferromagnetic Kagome Lattice Weyl Semimetal Co ₃ Sn ₂ S ₂ . Advanced Materials, 2019, 31, e1806622.	21.0	180
12	Extremely high magnetoresistance and conductivity in the type-II Weyl semimetals WP2 and MoP2. Nature Communications, 2017, 8, 1642.	12.8	178
13	Weyl Semimetals as Hydrogen Evolution Catalysts. Advanced Materials, 2017, 29, 1606202.	21.0	169
14	Thermal and electrical signatures of a hydrodynamic electron fluid in tungsten diphosphide. Nature Communications, 2018, 9, 4093.	12.8	163
15	Axionic charge-density wave in the Weyl semimetal (TaSe ₄) ₂ I. Nature, 2019, 575, 315-319.	27.8	143
16	Planar Hall effect in the Weyl semimetal GdPtBi. Physical Review B, 2018, 98, .	3.2	141
17	On the search for the chiral anomaly in Weyl semimetals: the negative longitudinal magnetoresistance. New Journal of Physics, 2016, 18, 085006.	2.9	140
18	Multiple Dirac cones at the surface of the topological metal LaBi. Nature Communications, 2017, 8, 13942.	12.8	135

#	ARTICLE	IF	CITATIONS
19	Anomalous Hall effect in Weyl semimetal half-Heusler compounds RPtBi (R = Gd and Nd). Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9140-9144.	7.1	126
20	Observation of unusual topological surface states in half-Heusler compounds LnPtBi (Ln=Lu, Y). Nature Communications, 2016, 7, 12924.	12.8	114
21	Large Magnetization and Reversible Magnetocaloric Effect at the Second-Order Magnetic Transition in Heusler Materials. Advanced Materials, 2016, 28, 3321-3325.	21.0	83
22	Observation of pseudo-two-dimensional electron transport in the rock salt-type topological semimetal LaBi. Physical Review B, 2016, 93, .	3.2	83
23	Dirac dispersion generates unusually large Nernst effect in Weyl semimetals. Physical Review B, 2018, 97, .	3.2	83
24	From Colossal to Zero: Controlling the Anomalous Hall Effect in Magnetic Heusler Compounds via Berry Curvature Design. Physical Review X, 2018, 8, .	8.9	74
25	Berry curvature unravelled by the anomalous Nernst effect in Mn_3Ge . Physical Review B, 2019, 100, .	3.2	73
26	Chiral magnetoresistance in the Weyl semimetal NbP. Scientific Reports, 2017, 7, 43394.	3.3	71
27	Topological Quantum Materials from the Viewpoint of Chemistry. Chemical Reviews, 2021, 121, 2780-2815.	47.7	70
28	Quantum oscillations and the Fermi surface topology of the Weyl semimetal NbP. Physical Review B, 2016, 93, .	3.2	64
29	Resolving the topological classification of bismuth with topological defects. Science Advances, 2019, 5, eaax6996.	10.3	59
30	Large Nernst power factor over a broad temperature range in polycrystalline Weyl semimetal NbP. Energy and Environmental Science, 2018, 11, 2813-2820.	30.8	57
31	Unusual magnetotransport from Si-square nets in topological semimetal HfSiS. Physical Review B, 2017, 95, .	3.2	55
32	Photochemical Water Splitting by Bismuth Chalcogenide Topological Insulators. ChemPhysChem, 2017, 18, 2322-2327.	2.1	54
33	Extremely high conductivity observed in the triple point topological metal MoP. Nature Communications, 2019, 10, 2475.	12.8	54
34	Mesoscopic superconductivity and high spin polarization coexisting at metallic point contacts on Weyl semimetal TaAs. Nature Communications, 2017, 8, 13974.	12.8	53
35	Mn ₂ PtIn: A tetragonal Heusler compound with exchange bias behavior. Applied Physics Letters, 2012, 100, .	3.3	52
36	Polymorphic Layered MoTe ₂ from Semiconductor, Topological Insulator, to Weyl Semimetal. Chemistry of Materials, 2017, 29, 699-707.	6.7	52

#	ARTICLE	IF	CITATIONS
37	Topological Quantum Phase Transition and Superconductivity Induced by Pressure in the Bismuth Tellurohalide BiTeI. <i>Advanced Materials</i> , 2017, 29, 1605965.	21.0	51
38	Intrinsic Anomalous Hall Effect in Ni-Substituted Magnetic Weyl Semimetal $\text{Co}_3\text{Sn}_2\text{S}_2$. <i>Chemistry of Materials</i> , 2020, 32, 1612-1617.	6.7	51
39	Evidence of surface transport and weak antilocalization in a single crystal of the $\text{Bi}_2\text{Te}_2\text{Se}$ topological insulator. <i>Physical Review B</i> , 2014, 90, .	3.2	50
40	High critical current density and improved flux pinning in bulk MgB ₂ synthesized by Ag addition. <i>Journal of Applied Physics</i> , 2007, 101, 043906.	2.5	49
41	Pressure-driven superconductivity in the transition-metal pentatelluride HfTe_5 . <i>Physical Review B</i> , 2016, 94, .	3.2	46
42	Compensated Ferrimagnetic Tetragonal Heusler Thin Films for Antiferromagnetic Spintronics. <i>Advanced Materials</i> , 2016, 28, 8499-8504.	21.0	46
43	Observation of giant spin-split Fermi-arc with maximal Chern number in the chiral topological semimetal PtGa. <i>Nature Communications</i> , 2020, 11, 2033.	12.8	46
44	Ultrahigh mobility and nonsaturating magnetoresistance in Heusler topological insulators. <i>Physical Review B</i> , 2012, 86, .	3.2	45
45	Anomalous Nernst effect and field-induced Lifshitz transition in the Weyl semimetals TaP and TaAs. <i>Physical Review B</i> , 2018, 98, .	3.2	45
46	Electronic structure of Pt based topological Heusler compounds with C1b structure and zero band gap. <i>Applied Physics Letters</i> , 2011, 98, 211901.	3.3	44
47	Detection of antiskyrmions by topological Hall effect in Heusler compounds. <i>Physical Review B</i> , 2020, 101, .	3.2	42
48	Temperature-driven reorganization of electronic order in CsV_3S_5 . <i>Physical Review B</i> , 2022, 105, .	3.2	41
49	Direct observation of band bending in the topological insulator Bi_2Se_3 . <i>Physical Review B</i> , 2012, 86, .	3.2	40
50	Evidence for one-dimensional chiral edge states in a magnetic Weyl semimetal $\text{Co}_3\text{Sn}_2\text{S}_2$. <i>Nature Communications</i> , 2021, 12, 4269.	12.8	40
51	Electronic structure and linear magnetoresistance of the gapless topological insulator PtLuSb. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	39
52	Hydrostatic pressure: A very effective approach to significantly enhance critical current density in granular iron pnictide superconductors. <i>Scientific Reports</i> , 2015, 5, 8213.	3.3	37
53	Berry phase and band structure analysis of the Weyl semimetal NbP. <i>Scientific Reports</i> , 2016, 6, 33859.	3.3	36
54	Signatures of Sixfold Degenerate Exotic Fermions in a Superconducting Metal PdSb_2 . <i>Advanced Materials</i> , 2020, 32, e1906046.	21.0	36

#	ARTICLE	IF	CITATIONS
55	Anisotropic topological Hall effect with real and momentum space Berry curvature in the antiskyrmion-hosting Heusler compound $Mn_{1.4}PtSn$. Physical Review B, 2019, 99, .	3.2	34
56	Thermopower and thermal conductivity in the Weyl semimetal NbP. Journal of Physics Condensed Matter, 2017, 29, 325701.	1.8	32
57	Effect of La doping on microstructure and critical current density of MgB ₂ . Superconductor Science and Technology, 2005, 18, 1210-1214.	3.5	31
58	Pressure tuning the Fermi surface topology of the Weyl semimetal NbP. Physical Review B, 2016, 93, .	3.2	29
59	2D Berry Curvature Driven Large Anomalous Hall Effect in Layered Topological Nodal Line MnAlGe. Advanced Materials, 2021, 33, e2006301.	21.0	28
60	Tetragonal Superstructure of the Antiskyrmion Hosting Heusler Compound Mn _{1.4} PtSn. Chemistry of Materials, 2019, 31, 5876-5880.	6.7	27
61	Enhancement of flux pinning and high critical current density in graphite doped MgB ₂ superconductor. Journal of Applied Physics, 2007, 102, 093910.	2.5	26
62	Magneto-Optics of a Weyl Semimetal beyond the Conical Band Approximation: Case Study of TaP. Physical Review Letters, 2020, 124, 176402.	7.8	25
63	Upper critical field, critical current density and thermally activated flux flow in fluorine doped CeFeAsO superconductors. Superconductor Science and Technology, 2010, 23, 105008.	3.5	24
64	Optical conductivity of the Weyl semimetal NbP. Physical Review B, 2018, 98, .	3.2	24
65	Anisotropic electrical and thermal magnetotransport in the magnetic semimetal GdPtBi. Physical Review B, 2020, 101, .	3.2	24
66	Linear-in-Frequency Optical Conductivity in GdPtBi due to Transitions near the Triple Points. Physical Review Letters, 2018, 121, 176601.	7.8	23
67	Signatures of the Magnetic Entropy in the Thermopower Signals in Nanoribbons of the Magnetic Weyl Semimetal Co ₃ Sn ₂ S ₂ . Nano Letters, 2020, 20, 300-305.	9.1	23
68	Kinetic arrest related to a first-order ferrimagnetic to antiferromagnetic transition in the Heusler compound Mn ₂ PtGa. Journal of Applied Physics, 2013, 113, .	2.5	22
69	Magneto-resistance and anomalous Hall effect in micro-ribbons of the magnetic Weyl semimetal Co ₃ Sn ₂ S ₂ . Applied Physics Letters, 2019, 114, .	3.3	22
70	Observation of the topological surface state in the nonsymmorphic topological insulator KHgSb. Physical Review B, 2017, 96, .	3.2	21
71	Chirality meets topology. Nature Materials, 2018, 17, 953-954.	27.5	20
72	Two-channel conduction in YbPtBi. Physical Review B, 2017, 95, .	3.2	18

#	ARTICLE	IF	CITATIONS
73	Electronic properties of topological insulator candidate CaAgAs. Journal of Physics Condensed Matter, 2018, 30, 045501.	1.8	18
74	Strong spin-orbit coupling and Dirac nodal lines in the three-dimensional electronic structure of metallic rutile IrO_2 . Physical Review B, 2019, 99, .	3.2	18
75	Observation of a linked-loop quantum state in a topological magnet. Nature, 2022, 604, 647-652.	27.8	18
76	Proximity-Induced Superconductivity and Quantum Interference in Topological Crystalline Insulator SnTe Thin-Film Devices. Nano Letters, 2018, 18, 1264-1268.	9.1	17
77	Observation of a phase transition within the domain walls of ferromagnetic $\text{Co}_3\text{Sn}_2\text{S}_2$. Nature Communications, 2022, 13, .	12.8	17
78	Observation of topological surface states and strong electron/hole imbalance in extreme magnetoresistance compound LaBi. Physical Review Materials, 2018, 2, .	2.4	16
79	Quasi-symmetry-protected topology in a semi-metal. Nature Physics, 2022, 18, 813-818.	16.7	15
80	Upper critical field and thermally activated flux flow in $\text{LaFeAsO}_{1-x}\text{F}_x$. Journal of Applied Physics, 2011, 109, 07E162.	2.5	14
81	Electronic structure and nonsaturating magnetoresistance of superconducting Heusler topological insulators. Journal of Applied Physics, 2013, 113, 17E142.	2.5	14
82	Large out-of-plane and linear in-plane magnetoresistance in layered hafnium pentatelluride. Physical Review B, 2017, 95, .	3.2	14
83	Temperature dependence of quantum oscillations from non-parabolic dispersions. Nature Communications, 2021, 12, 6213.	12.8	14
84	Effect of magnetic field on the hydrogen evolution activity using non-magnetic Weyl semimetal catalysts. Dalton Transactions, 2020, 49, 3398-3402.	3.3	13
85	Giant Topological Hall Effect in the Noncollinear Phase of Two-Dimensional Antiferromagnetic Topological Insulator MnBi_4Te_7 . Chemistry of Materials, 2021, 33, 8343-8350.	6.7	13
86	Synthesis and microstructural studies of iron oxypnictide $\text{LaO}_{1-x}\text{FeAs}$ superconductors. Superconductor Science and Technology, 2009, 22, 015005.	3.5	12
87	Strong correlation between mobility and magnetoresistance in Weyl and Dirac semimetals. JPhys Materials, 2020, 3, 024003.	4.2	12
88	Improved Critical Current Density of MgB_2 -Carbon Nanotubes Composite. Journal of Nanoscience and Nanotechnology, 2007, 7, 1804-1809.	0.9	11
89	Upper critical field, critical current density and thermally activated flux flow in $\text{CaFe}_{0.9}\text{Co}_{0.1}\text{As}$ superconductor. Superconductor Science and Technology, 2012, 25, 045004.	3.5	10
90	Magnetic field induced strong valley polarization in the three-dimensional topological semimetal LaBi. Physical Review B, 2017, 96, .	3.2	10

#	ARTICLE	IF	CITATIONS
91	Kinetic arrest of the first-order $R\bar{3}c$ to $P6_3/mmc$ phase transition in supercooled $\text{La}_{1-x}\text{MnO}_3$ ($x = 1$). <i>Physical Review Letters</i> , 2019, 123, 075701.	1.8	14
92	Effect of topology on quasiparticle interactions in the Weyl semimetal WTe_2 . <i>Physical Review B</i> , 2020, 102, .	3.2	8
93	Magnon spectrum of the Weyl semimetal half-Heusler compound GdPtBi . <i>Physical Review B</i> , 2020, 101, .	3.2	9
94	On the synthesis and characterization of La doped MgB_2 superconductor. <i>Crystal Research and Technology</i> , 2004, 39, 718-725.	1.3	8
95	Pressure-induced Lifshitz and structural transitions in NbAs and TaAs: experiments and theory. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 185401.	1.8	8
96	Temperature-induced modification of the Dirac cone in the tetradymite topological insulator Bi_2Te_3 . <i>Physical Review B</i> , 2018, 98, .	3.2	8
97	Giant enhancement of the skyrmion stability in a chemically strained helimagnet. <i>Physical Review B</i> , 2019, 100, .	3.2	8
98	Magnetotransport and thermal properties characterization of 55 K superconductor $\text{SmFeAsO}_{0.85}\text{F}_{0.15}$. <i>AIP Advances</i> , 2013, 3, .	1.3	6
99	Structure and electrical resistivity of mixed-valent EuNi_2P_2 at high pressure. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 335701.	1.8	6
100	Pressure-induced Lifshitz transition in NbP: Raman, x-ray diffraction, electrical transport, and density functional theory. <i>Physical Review B</i> , 2018, 97, .	3.2	5
101	Magneto-thermoelectric characterization of a HfTe_5 micro-ribbon. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	5
102	Field-induced charge symmetry revealed by nuclear magnetic resonance in the topological insulator Bi_2Te_3 . <i>Physical Review Research</i> , 2021, 3, .	3.6	5
103	Anisotropic large diamagnetism in Dirac semimetals ZrTe_5 and HfTe_5 . <i>Journal of Physics Condensed Matter</i> , 2022, 34, 225802.	1.8	5
104	Pressure-induced electronic and structural phase transitions in Dirac semimetal Cd_3As_2 : Raman study. <i>Europhysics Letters</i> , 2017, 120, 57003.	2.0	4
105	Anisotropic Nodalâ€¦ Derived Large Anomalous Hall Conductivity in ZrMnP and HfMnP . <i>Advanced Materials</i> , 2021, 33, 2104126.	21.0	4
106	Ultrafast Subâ€¦ fs Allâ€¦ Optical Modulation and Efficient Thirdâ€¦ Harmonic Generation in Weyl Semimetal Niobium Phosphide Thin Films. <i>Advanced Materials</i> , 2022, 34, e2106733.	21.0	4
107	Improved superconducting properties of MgB_2 bulk materials prepared by sintering. <i>Journal Physics D: Applied Physics</i> , 2003, 36, 2165-2169.	2.8	3
108	Terahertz transmission through TaAs single crystals in simultaneously applied magnetic and electric fields: Possible optical signatures of the chiral anomaly in a Weyl semimetal. <i>Results in Physics</i> , 2019, 15, 102630.	4.1	3

#	ARTICLE	IF	CITATIONS
109	Giant Anomalous Hall Conductivity in the Itinerant Ferromagnet LaCrSb_3 and the Effect of f Electrons. <i>Advanced Quantum Technologies</i> , 2021, 4, 2100023.	3.9	3
110	Temperature dependence of conduction noise of MgB_2 superconductor. <i>Physica C: Superconductivity and Its Applications</i> , 2008, 468, 872-875.	1.2	2
111	Superconductivity and critical current density in LaFeAsO_{1-x} compounds. <i>Thin Solid Films</i> , 2010, 518, e42-e45.	1.8	2
112	Effect of film thickness on the transport properties of MgB_2 synthesized by spray pyrolysis. <i>Physica C: Superconductivity and Its Applications</i> , 2011, 471, 104-107.	1.2	2
113	Occurrence of Superconductivity and Magnetism in Nominally Undoped LaOFeAs . <i>Journal of Superconductivity and Novel Magnetism</i> , 2010, 23, 1461-1466.	1.8	1
114	Observation of the critical state to multiple-type Dirac semimetal phases in KMgBi . <i>Journal of Applied Physics</i> , 2021, 129, .	2.5	1
115	Synthesis and Characterization of La Doped MgB_2 Superconductor.. <i>ChemInform</i> , 2004, 35, no.	0.0	0
116	Dependence of Superconductivity and Its Weakly Linked Behavior in Bulk $\text{LaO}_{1-x}\text{F}_x\text{FeAs}$ on F Doping. <i>Journal of Superconductivity and Novel Magnetism</i> , 2012, 25, 935-942.	1.8	0
117	Non-linear Shubnikov-de Haas oscillations in the self-heating regime. <i>Applied Physics Letters</i> , 2021, 119, 224101.	3.3	0