

Chandra Shekhar

List of Publications by Year in descending order

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117
papers

8,696
citations

57758

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8676
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrafast Sub-100 fs All-Optical Modulation and Efficient Third-Harmonic Generation in Weyl Semimetal Niobium Phosphide Thin Films. <i>Advanced Materials</i> , 2022, 34, e2106733.	21.0	4
2	Anisotropic large diamagnetism in Dirac semimetals $ZrTe_5$ and $HfTe_5$. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 225802.	1.8	5
3	Observation of a linked-loop quantum state in a topological magnet. <i>Nature</i> , 2022, 604, 647-652.	27.8	18
4	Quasi-symmetry-protected topology in a semi-metal. <i>Nature Physics</i> , 2022, 18, 813-818.	16.7	15
5	Temperature-driven reorganization of electronic order in CsV_3Sb_5 . <i>Physical Review B</i> , 2022, 105, .	11.1	11
6	Observation of a phase transition within the domain walls of ferromagnetic $Co_3Sn_2S_2$. <i>Nature Communications</i> , 2022, 13, .	12.8	17
7	Topological Quantum Materials from the Viewpoint of Chemistry. <i>Chemical Reviews</i> , 2021, 121, 2780-2815.	47.7	70
8	Field-induced charge symmetry revealed by nuclear magnetic resonance in the topological insulator Bi_2Se_3 . <i>Physical Review Research</i> , 2021, 3, .	3.6	5
9	2D Berry-Curvature-Driven Large Anomalous Hall Effect in Layered Topological Nodal-Line $MnAlGe$. <i>Advanced Materials</i> , 2021, 33, e2006301.	21.0	28
10	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
11	Observation of the critical state to multiple-type Dirac semimetal phases in $KMgBi$. <i>Journal of Applied Physics</i> , 2021, 129, .	2.5	1
12	Evidence for one-dimensional chiral edge states in a magnetic Weyl semimetal $Co_3Sn_2S_2$. <i>Nature Communications</i> , 2021, 12, 4269.	12.8	40
13	Anisotropic Nodal-Line-Derived Large Anomalous Hall Conductivity in $ZrMnP$ and $HfMnP$. <i>Advanced Materials</i> , 2021, 33, 2104126.	21.0	4
14	Temperature dependence of quantum oscillations from non-parabolic dispersions. <i>Nature Communications</i> , 2021, 12, 6213.	12.8	14
15	Giant Topological Hall Effect in the Noncollinear Phase of Two-Dimensional Antiferromagnetic Topological Insulator $MnBi_4Te_7$. <i>Chemistry of Materials</i> , 2021, 33, 8343-8350.	6.7	13
16	Non-linear Shubnikov-de Haas oscillations in the self-heating regime. <i>Applied Physics Letters</i> , 2021, 119, 224101.	3.3	0
17	Signatures of the Magnetic Entropy in the Thermopower Signals in Nanoribbons of the Magnetic Weyl Semimetal $Co_3Sn_2S_2$. <i>Nano Letters</i> , 2020, 20, 300-305.	9.1	23
18	Effect of topology on quasiparticle interactions in the Weyl semimetal WP_2 . <i>Physical Review B</i> , 2020, 102, .	3.2	3

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19	Anisotropic electrical and thermal magnetotransport in the magnetic semimetal GdPtBi. Physical Review B, 2020, 101, .	3.2	24
20	Effect of magnetic field on the hydrogen evolution activity using non-magnetic Weyl semimetal catalysts. Dalton Transactions, 2020, 49, 3398-3402.	3.3	13
21	Signatures of Sixfold Degenerate Exotic Fermions in a Superconducting Metal PdSb ₂ . Advanced Materials, 2020, 32, e1906046.	21.0	36
22	Magnon spectrum of the Weyl semimetal half-Heusler compound GdPtBi. Physical Review B, 2020, 101, .	3.2	9
23	Detection of antiskyrmions by topological Hall effect in Heusler compounds. Physical Review B, 2020, 101, .	3.2	42
24	Strong correlation between mobility and magnetoresistance in Weyl and Dirac semimetals. JPhys Materials, 2020, 3, 024003.	4.2	12
25	Intrinsic Anomalous Hall Effect in Ni-Substituted Magnetic Weyl Semimetal Co ₃ Sn ₂ S ₂ . Chemistry of Materials, 2020, 32, 1612-1617.	6.7	51
26	Observation of giant spin-split Fermi-arc with maximal Chern number in the chiral topological semimetal PtGa. Nature Communications, 2020, 11, 2033.	12.8	46
27	Magneto-Optics of a Weyl Semimetal beyond the Conical Band Approximation: Case Study of TaP. Physical Review Letters, 2020, 124, 176402.	7.8	25
28	Magneto-thermoelectric characterization of a HfTe ₅ micro-ribbon. Applied Physics Letters, 2019, 115, .	3.3	5
29	Berry curvature unravelled by the anomalous Nernst effect in Mn_3Ge . Physical Review B, 2019, 100, .	3.2	18
30	Tetragonal Superstructure of the Antiskyrmion Hosting Heusler Compound Mn _{1.4} PtSn. Chemistry of Materials, 2019, 31, 5876-5880.	6.7	27
31	Resolving the topological classification of bismuth with topological defects. Science Advances, 2019, 5, eaax6996.	10.3	59
32	Terahertz transmission through TaAs single crystals in simultaneously applied magnetic and electric fields: Possible optical signatures of the chiral anomaly in a Weyl semimetal. Results in Physics, 2019, 15, 102630.	4.1	3
33	Extremely high conductivity observed in the triple point topological metal MoP. Nature Communications, 2019, 10, 2475.	12.8	54
34	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
35	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
36	Anomalous Nernst effect beyond the magnetization scaling relation in the ferromagnetic Heusler compound Co ₂ MnGa. NPG Asia Materials, 2019, 11, .	7.9	190

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37	Magnetoresistance 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
38	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
39	Giant enhancement of the skyrmion stability in a chemically strained helimagnet. Physical Review B, 2019, 100, .	3.2	8
40	Axionic charge-density wave in the Weyl semimetal (TaSe ₄) ₂ I. Nature, 2019, 575, 315-319.	27.8	143
41	Dirac dispersion generates unusually large Nernst effect in Weyl semimetals. Physical Review B, 2018, 97, .	3.2	83
42	Pressure-induced Lifshitz transition in NbP: Raman, x-ray diffraction, electrical transport, and density functional theory. Physical Review B, 2018, 97, .	3.2	5
43	Proximity-Induced Superconductivity and Quantum Interference in Topological Crystalline Insulator SnTe Thin-Film Devices. Nano Letters, 2018, 18, 1264-1268.	9.1	17
44	Pressure-induced Lifshitz and structural transitions in NbAs and TaAs: experiments and theory. Journal of Physics Condensed Matter, 2018, 30, 185401.	1.8	8
45	Electronic properties of topological insulator candidate CaAgAs. Journal of Physics Condensed Matter, 2018, 30, 045501.	1.8	18
46	Optical conductivity of the Weyl semimetal NbP. Physical Review B, 2018, 98, .	3.2	24
47	Anomalous Nernst effect and field-induced Lifshitz transition in the Weyl semimetals TaP and TaAs. Physical Review B, 2018, 98, .	3.2	45
48	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
49	Thermal and electrical signatures of a hydrodynamic electron fluid in tungsten diphosphide. Nature Communications, 2018, 9, 4093.	12.8	163
50	Chirality meets topology. Nature Materials, 2018, 17, 953-954.	27.5	20
51	Linear-in-Frequency Optical Conductivity in GdPtBi due to Transitions near the Triple Points. Physical Review Letters, 2018, 121, 176601.	7.8	23
52	High-mobility band-like charge transport in a semiconducting two-dimensional metal-organic framework. Nature Materials, 2018, 17, 1027-1032.	27.5	341
53	Temperature-induced modification of the Dirac cone in the tetradymite topological insulator Bi_2Te_3 . Physical Review B, 2018, 98, .	3.2	8
54	Giant anomalous Hall effect in a ferromagnetic kagome-lattice semimetal. Nature Physics, 2018, 14, 1125-1131.	16.7	876

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55	Planar Hall effect in the Weyl semimetal GdPtBi. <i>Physical Review B</i> , 2018, 98, .	3.2	141
56	Anomalous Hall effect in Weyl semimetal half-Heusler compounds RPtBi (R = Gd and Nd). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 9140-9144.	7.1	126
57	Large Nernst power factor over a broad temperature range in polycrystalline Weyl semimetal NbP. <i>Energy and Environmental Science</i> , 2018, 11, 2813-2820.	30.8	57
58	Observation of topological surface states and strong electron/hole imbalance in extreme magnetoresistance compound LaBi. <i>Physical Review Materials</i> , 2018, 2, .	2.4	16
59	Multiple Dirac cones at the surface of the topological metal LaBi. <i>Nature Communications</i> , 2017, 8, 13942.	12.8	135
60	Mesoscopic superconductivity and high spin polarization coexisting at metallic point contacts on Weyl semimetal TaAs. <i>Nature Communications</i> , 2017, 8, 13974.	12.8	53
61	Topological Quantum Phase Transition and Superconductivity Induced by Pressure in the Bismuth Tellurohalide BiTeI. <i>Advanced Materials</i> , 2017, 29, 1605965.	21.0	51
62	Unusual magnetotransport from Si-square nets in topological semimetal HfSiS. <i>Physical Review B</i> , 2017, 95, .	3.2	55
63	Weyl Semimetals as Hydrogen Evolution Catalysts. <i>Advanced Materials</i> , 2017, 29, 1606202.	21.0	169
64	Polymorphic Layered MoTe ₂ from Semiconductor, Topological Insulator, to Weyl Semimetal. <i>Chemistry of Materials</i> , 2017, 29, 699-707.	6.7	52
65	Magnetic field induced strong valley polarization in the three-dimensional topological semimetal LaBi. <i>Physical Review B</i> , 2017, 96, .	3.2	10
66	Experimental signatures of the mixed axial-gravitational anomaly in the Weyl semimetal NbP. <i>Nature</i> , 2017, 547, 324-327.	27.8	222
67	Photochemical Water Splitting by Bismuth Chalcogenide Topological Insulators. <i>ChemPhysChem</i> , 2017, 18, 2322-2327.	2.1	54
68	Chiral magnetoresistance in the Weyl semimetal NbP. <i>Scientific Reports</i> , 2017, 7, 43394.	3.3	71
69	Extremely high magnetoresistance and conductivity in the type-II Weyl semimetals WP ₂ and MoP ₂ . <i>Nature Communications</i> , 2017, 8, 1642.	12.8	178
70	Observation of the topological surface state in the nonsymmorphic topological insulator KHgSb. <i>Physical Review B</i> , 2017, 96, .	3.2	21
71	Thermopower and thermal conductivity in the Weyl semimetal NbP. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 325701.	1.8	32
72	Two-channel conduction in YbPtBi. <i>Physical Review B</i> , 2017, 95, .	3.2	18

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73	Large out-of-plane and linear in-plane magnetoresistance in layered hafnium pentatelluride. Physical Review B, 2017, 95, .	3.2	14
74	Pressure-induced electronic and structural phase transitions in Dirac semimetal Cd ₃ As ₂ : Raman study. Europhysics Letters, 2017, 120, 57003.	2.0	4
75	Large Magnetization and Reversible Magnetocaloric Effect at the Second-Order Magnetic Transition in Heusler Materials. Advanced Materials, 2016, 28, 3321-3325.	21.0	83
76	On the search for the chiral anomaly in Weyl semimetals: the negative longitudinal magnetoresistance. New Journal of Physics, 2016, 18, 085006.	2.9	140
77	Negative magnetoresistance without well-defined chirality in the Weyl semimetal TaP. Nature Communications, 2016, 7, 11615.	12.8	429
78	Observation of unusual topological surface states in half-Heusler compounds LnPtBi (Ln=Lu, Y). Nature Communications, 2016, 7, 12924.	12.8	114
79	Pressure-driven superconductivity in the transition-metal pentatelluride $HfTe_5$. Physical Review B, 2016, 94, .	3.2	46
80	Compensated Ferrimagnetic Tetragonal Heusler Thin Films for Antiferromagnetic Spintronics. Advanced Materials, 2016, 28, 8499-8504.	21.0	46
81	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
82	Quantum oscillations and the Fermi surface topology of the Weyl semimetal NbP. Physical Review B, 2016, 93, .	3.2	64
83	Pressure tuning the Fermi surface topology of the Weyl semimetal NbP. Physical Review B, 2016, 93, .	3.2	29
84	Observation of pseudo-two-dimensional electron transport in the rock salt-type topological semimetal LaBi. Physical Review B, 2016, 93, .	3.2	83
85	Superconductivity in Weyl semimetal candidate MoTe ₂ . Nature Communications, 2016, 7, 11038.	12.8	611
86	Berry phase and band structure analysis of the Weyl semimetal NbP. Scientific Reports, 2016, 6, 33859.	3.3	36
87	Hydrostatic pressure: A very effective approach to significantly enhance critical current density in granular iron pnictide superconductors. Scientific Reports, 2015, 5, 8213.	3.3	37
88	Extremely large magnetoresistance and ultrahigh mobility in the topological Weyl semimetal candidate NbP. Nature Physics, 2015, 11, 645-649.	16.7	893
89	Design of compensated ferrimagnetic Heusler alloys for giant tunable exchange bias. Nature Materials, 2015, 14, 679-684.	27.5	250
90	Evidence of surface transport and weak antilocalization in a single crystal of the topological insulator. Physical Review B, 2014, 90, .	3.2	50

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91	Structure and electrical resistivity of mixed-valent EuNi ₂ P ₂ at high pressure. Journal of Physics Condensed Matter, 2014, 26, 335701.	1.8	6
92	Direct observation of band bending in the topological insulator Bi ₂ Se ₃ . Physical Review B, 2013, 88, .	3.2	40
93	Large Zero-Field Cooled Exchange-Bias in Bulk Mn ₂ PtGa. Physical Review Letters, 2013, 110, 127204.	7.8	182
94	Electronic structure and nonsaturating magnetoresistance of superconducting Heusler topological insulators. Journal of Applied Physics, 2013, 113, 17E142.	2.5	14
95	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
96	Magnetotransport and thermal properties characterization of 55 K superconductor SmFeAsO _{0.85} F _{0.15} . AIP Advances, 2013, 3, .	1.3	6
97	Kinetic arrest of the first-order Rar ₃ c ₅ to Pbnm phase transition in supercooled LaxMnO ₃ + $\hat{\Gamma}$ (x= 1) Tj ETQq1 1 0.784314 rgBT /Overbo	1.8	9
98	Electronic structure and linear magnetoresistance of the gapless topological insulator PtLuSb. Applied Physics Letters, 2012, 100, .	3.3	39
99	Mn ₂ PtIn: A tetragonal Heusler compound with exchange bias behavior. Applied Physics Letters, 2012, 100, .	3.3	52
100	Ultrahigh mobility and nonsaturating magnetoresistance in Heusler topological insulators. Physical Review B, 2012, 86, .	3.2	45
101	Upper critical field, critical current density and thermally activated flux flow in CaFe _{0.9} Co _{0.1} As superconductor. Superconductor Science and Technology, 2012, 25, 045004.	3.5	10
102	Dependence of Superconductivity and Its Weakly Linked Behavior in Bulk LaO _{1-x} F _x FeAs on F Doping. Journal of Superconductivity and Novel Magnetism, 2012, 25, 935-942.	1.8	0
103	Electronic structure of Pt based topological Heusler compounds with C1b structure and $\hat{\epsilon}$ zero band gap. Applied Physics Letters, 2011, 98, 211901.	3.3	44
104	Upper critical field and thermally activated flux flow in LaFeAsO _{1-x} F _x . Journal of Applied Physics, 2011, 109, 07E162.	2.5	14
105	Effect of film thickness on the transport properties of MgB ₂ synthesized by spray pyrolysis. Physica C: Superconductivity and Its Applications, 2011, 471, 104-107.	1.2	2
106	Occurrence of Superconductivity and Magnetism in Nominally Undoped LaOFeAs. Journal of Superconductivity and Novel Magnetism, 2010, 23, 1461-1466.	1.8	1
107	Superconductivity and critical current density in LaFeAsO _{1-x} F _x compounds. Thin Solid Films, 2010, 518, e42-e45.	1.8	2
108	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

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109	Synthesis and microstructural studies of iron oxyprictide LaO _{1-x} FeAs superconductors. Superconductor Science and Technology, 2009, 22, 015005.	3.5	12
110	Temperature dependence of conduction noise of MgB ₂ superconductor. Physica C: Superconductivity and Its Applications, 2008, 468, 872-875.	1.2	2
111	High critical current density and improved flux pinning in bulk MgB ₂ synthesized by Ag addition. Journal of Applied Physics, 2007, 101, 043906.	2.5	49
112	Improved Critical Current Density of MgB ₂ -Carbon Nanotubes Composite. Journal of Nanoscience and Nanotechnology, 2007, 7, 1804-1809.	0.9	11
113	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
114	Effect of La doping on microstructure and critical current density of MgB ₂ . Superconductor Science and Technology, 2005, 18, 1210-1214.	3.5	31
115	On the synthesis and characterization of La doped MgB ₂ superconductor. Crystal Research and Technology, 2004, 39, 718-725.	1.3	8
116	Synthesis and Characterization of La Doped MgB ₂ Superconductor.. ChemInform, 2004, 35, no.	0.0	0
117	Improved superconducting properties of MgB ₂ bulk materials prepared by sintering. Journal Physics D: Applied Physics, 2003, 36, 2165-2169.	2.8	3