

# Ilya Belopolski

## List of Publications by Year in descending order

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Version: 2024-02-01

66  
papers

15,357  
citations

50170

46  
h-index

102304

66  
g-index

67  
all docs

67  
docs citations

67  
times ranked

7918  
citing authors

#	ARTICLE	IF	CITATIONS
1	Discovery of a Weyl fermion semimetal and topological Fermi arcs. Science, 2015, 349, 613-617.	6.0	2,753
2	A Weyl Fermion semimetal with surface Fermi arcs in the transition metal monopnictide TaAs class. Nature Communications, 2015, 6, 7373.	5.8	1,336
3	Observation of a three-dimensional topological Dirac semimetal phase in high-mobility Cd <sub>3</sub> As <sub>2</sub> . Nature Communications, 2014, 5, 3786.	5.8	1,166
4	Discovery of a Weyl fermion state with Fermi arcs in niobium arsenide. Nature Physics, 2015, 11, 748-754.	6.5	817
5	Topological nodal-line fermions in spin-orbit metal PbTaSe <sub>2</sub> . Nature Communications, 2016, 7, 10556.	5.8	688
6	Observation of Fermi arc surface states in a topological metal. Science, 2015, 347, 294-298.	6.0	603
7	Signatures of the Adler-Bell-Jackiw chiral anomaly in a Weyl fermion semimetal. Nature Communications, 2016, 7, 10735.	5.8	603
8	Unconventional chiral charge order in kagome superconductor KV <sub>3</sub> Sb <sub>5</sub> . Nature Materials, 2021, 20, 1353-1357.	13.3	391
9	Discovery of topological Weyl fermion lines and drumhead surface states in a room temperature magnet. Science, 2019, 365, 1278-1281.	6.0	374
10	Discovery of Weyl Fermion Semimetals and Topological Fermi Arc States. Annual Review of Condensed Matter Physics, 2017, 8, 289-309.	5.2	349
11	Experimental discovery of a topological Weyl semimetal state in TaP. Science Advances, 2015, 1, e1501092.	4.7	337
12	Observation of topological nodal fermion semimetal phase in ZrSiS. Physical Review B, 2016, 93, .	1.1	309
13	New type of Weyl semimetal with quadratic double Weyl fermions. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1180-1185.	3.3	291
14	Negative flat band magnetism in a spin-orbit-coupled correlated kagome magnet. Nature Physics, 2019, 15, 443-448.	6.5	283
15	Unconventional Chiral Fermions and Large Topological Fermi Arcs in RhSi. Physical Review Letters, 2017, 119, 206401.	2.9	270
16	Drumhead surface states and topological nodal-line fermions in TlTaSe <sub>2</sub> . Physical Review B, 2016, 93, .	1.1	268
17	Giant and anisotropic many-body spin-orbit tunability in a strongly correlated kagome magnet. Nature, 2018, 562, 91-95.	13.7	255
18	Quantum-limit Chern topological magnetism in TbMn <sub>6</sub> Sn <sub>6</sub> . Nature, 2020, 583, 533-536.	13.7	253



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37	Spin Polarization and Texture of the Fermi Arcs in the Weyl Fermion Semimetal TaAs. Physical Review Letters, 2016, 116, 096801.	2.9	102
38	Signatures of a time-reversal symmetric Weyl semimetal with only four Weyl points. Nature Communications, 2017, 8, 942.	5.8	98
39	Gigantic Surface Lifetime of an Intrinsic Topological Insulator. Physical Review Letters, 2015, 115, 116801.	2.9	84
40	Weyl, Dirac and high-fold chiral fermions in topological quantum matter. Nature Reviews Materials, 2021, 6, 784-803.	23.3	82
41	Topological Dirac surface states and superconducting pairing correlations in $\text{PbTaSe}_2$ . Physical Review B, 2016, 93, .	1.1	76
42	Bulk crystal growth and electronic characterization of the 3D Dirac semimetal $\text{Na}_3\text{Bi}$ . APL Materials, 2015, 3, .	2.2	76
43	Atomic-Scale Visualization of Quasiparticle Interference on a Type-II Weyl Semimetal Surface. Physical Review Letters, 2016, 117, 266804.	2.9	56
44	Observation of Weyl fermions in a magnetic non-centrosymmetric crystal. Nature Communications, 2020, 11, 3356.	5.8	55
45	Signatures of Fermi Arcs in the Quasiparticle Interferences of the Weyl Semimetals TaAs and NbP. Physical Review Letters, 2016, 116, 066601.	2.9	54
46	A novel artificial condensed matter lattice and a new platform for one-dimensional topological phases. Science Advances, 2017, 3, e1501692.	4.7	48
47	Crystal growth and quantum oscillations in the topological chiral semimetal $\text{CoSi}$ . Physical Review B, 2019, 100, .	1.1	48
48	Observation of the spin-polarized surface state in a noncentrosymmetric superconductor $\text{BiPd}$ . Nature Communications, 2016, 7, 13315.	5.8	42
49	Unconventional Photocurrents from Surface Fermi Arcs in Topological Chiral Semimetals. Physical Review Letters, 2020, 124, 166404.	2.9	40
50	Unconventional transformation of spin Dirac phase across a topological quantum phase transition. Nature Communications, 2015, 6, 6870.	5.8	34
51	Observation of gapless Dirac surface states in $\text{ZrGeTe}$ . Physical Review B, 2018, 97, .	1.1	34
52	Spin-orbit quantum impurity in a topological magnet. Nature Communications, 2020, 11, 4415.	5.8	34
53	Fermi surface topology and hot spot distribution in the Kondo lattice system $\text{CeB}_6$ . Physical Review B, 2015, 92, .	1.1	29
54	Field-free platform for Majorana-like zero mode in superconductors with a topological surface state. Physical Review B, 2020, 101, .	1.1	22

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55	Electronic structure and relaxation dynamics in a superconducting topological material. Scientific Reports, 2016, 6, 22557.	1.6	21
56	Mirror Protected Dirac Fermions on a Weyl Semimetal NbP Surface. Physical Review Letters, 2017, 119, 196403.	2.9	20
57	Observation of sixfold degenerate fermions in $\text{PdS}$ . Physical Review B, 2020, 101, .	1.1	20
58	Tunable spin helical Dirac quasiparticles on the surface of three-dimensional HgTe. Physical Review B, 2015, 92, .	1.1	19
59	Quantum Phase Transition of Correlated Iron-Based Superconductivity in $\text{LiFeAs}$ . Physical Review Letters, 2019, 123, 217004.	2.9	19
60	Observation of a linked-loop quantum state in a topological magnet. Nature, 2022, 604, 647-652.	13.7	18
61	Signatures of Weyl Fermion Annihilation in a Correlated Kagome Magnet. Physical Review Letters, 2021, 127, 256403.	2.9	17
62	Surface versus bulk Dirac state tuning in a three-dimensional topological Dirac semimetal. Physical Review B, 2015, 91, .	1.1	16
63	Observation of metallic surface states in the strongly correlated Kitaev-Heisenberg candidate $\text{Na}_2\text{IrO}_5$ . Physical Review B, 2016, 93, .	1.1	16
64	Vector field controlled vortex lattice symmetry in $\text{LiFeAs}$ using scanning tunneling microscopy. Physical Review B, 2019, 99, .	1.1	15
65	Spin-correlated electronic state on the surface of a spin-orbit Mott system. Physical Review B, 2014, 90, .	1.1	11
66	Visualizing the out-of-plane electronic dispersions in an intercalated transition metal dichalcogenide. Physical Review B, 2022, 105, .	1.1	9