

Roni Ilan

List of Publications by Year in descending order

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Version: 2024-02-01

34
papers

970
citations

430442

18
h-index

433756

31
g-index

34
all docs

34
docs citations

34
times ranked

1268
citing authors

#	ARTICLE	IF	CITATIONS
1	Detection of sub-MeV dark matter with three-dimensional Dirac materials. Physical Review D, 2018, 97, .	1.6	142
2	Inhomogeneous Weyl and Dirac Semimetals: Transport in Axial Magnetic Fields and Fermi Arc Surface States from Pseudo-Landau Levels. Physical Review X, 2016, 6, .	2.8	125
3	Axial-field-induced chiral channels in an acoustic Weyl system. Nature Physics, 2019, 15, 357-361.	6.5	86
4	Pseudo-electromagnetic fields in 3D topological semimetals. Nature Reviews Physics, 2020, 2, 29-41.	11.9	76
5	Inducing superconductivity in Weyl semimetal microstructures by selective ion sputtering. Science Advances, 2017, 3, e1602983.	4.7	68
6	Coulomb Blockade as a Probe for Non-Abelian Statistics in Read-Rezayi States. Physical Review Letters, 2008, 100, 086803.	2.9	41
7	Interference, Coulomb blockade, and the identification of non-Abelian quantum Hall states. Physical Review B, 2010, 82, .	1.1	34
8	Robust Transport Signatures of Topological Superconductivity in Topological Insulator Nanowires. Physical Review Letters, 2014, 113, 107003.	2.9	34
9	Non-Newtonian Topological Mechanical Metamaterials Using Feedback Control. Physical Review Letters, 2020, 125, 256802.	2.9	33
10	Spin-Based Mach-Zehnder Interferometry in Topological Insulator $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle p \langle \text{mml:mi} \rangle \langle \text{mml:mtext} \rangle \hat{a} \langle \text{mml:mtext} \rangle \langle \text{mml:mi} \rangle n \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \text{Junctions. Physical Review Letters, 2015, 115, 096802.}$	2.9	32
11	Dynamical Piezoelectric and Magnetopiezoelectric Effects in Polar Metals from Berry Phases and Orbital Moments. Physical Review Letters, 2016, 117, 257601.	2.9	30
12	Detecting perfect transmission in Josephson junctions on the surface of three dimensional topological insulators. New Journal of Physics, 2014, 16, 053007.	1.2	27
13	Experimental signatures of non-Abelian statistics in clustered quantum Hall states. Physical Review B, 2009, 79, .	1.1	25
14	Predicted signatures of p-wave superfluid phases and Majorana zero modes of fermionic atoms in rf absorption. Physical Review B, 2007, 76, .	1.1	23
15	Nonequilibrium Transport Through a Gate-Controlled Barrier on the Quantum Spin Hall Edge. Physical Review Letters, 2012, 109, 216602.	2.9	21
16	Real-time steering of curved sound beams in a feedback-based topological acoustic metamaterial. Mechanical Systems and Signal Processing, 2021, 153, 107479.	4.4	20
17	Berry connection induced anomalous wave-packet dynamics in non-Hermitian systems. Physical Review B, 2020, 102, .	1.1	18
18	Conditions for fully gapped topological superconductivity in topological insulator nanowires. SciPost Physics, 2019, 6, .	1.5	18

#	ARTICLE	IF	CITATIONS
19	Electrons and Phonons on the Square Fibonacci Tiling. <i>Ferroelectrics</i> , 2004, 305, 15-19.	0.3	16
20	Hawking fragmentation and Hawking attenuation in Weyl semimetals. <i>Physical Review Research</i> , 2022, 4, .	1.3	15
21	Quantum Anomalous Parity Hall Effect in Magnetically Disordered Topological Insulator Films. <i>Physical Review Letters</i> , 2019, 123, 046801.	2.9	13
22	Delocalization Transition of a Disordered Axion Insulator. <i>Physical Review Letters</i> , 2021, 127, 016602.	2.9	13
23	Anomalous conductance scaling in strained Weyl semimetals. <i>Physical Review Research</i> , 2019, 1, .	1.3	10
24	Signatures of Non-Abelian Statistics in Nonlinear Coulomb Blockade Transport. <i>Physical Review Letters</i> , 2011, 106, 136801.	2.9	9
25	Anomaly-induced sound absorption in Weyl semimetals. <i>Physical Review B</i> , 2021, 103, .	1.1	9
26	Perfect transmission and Aharonov-Bohm oscillations in topological insulator nanowires with nonuniform cross section. <i>Physical Review B</i> , 2020, 101, .	1.1	7
27	Special topic on topological semimetalsâ€™New directions. <i>APL Materials</i> , 2020, 8, .	2.2	5
28	Pseudo field effects in type II Weyl semimetals: new probes for over tilted cones. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 484002.	0.7	5
29	Bulk-boundary quantum oscillations in inhomogeneous Weyl semimetals. <i>New Journal of Physics</i> , 2020, 22, 013035.	1.2	4
30	Electrical and thermal transport in the quasicrystalline limit of coupled Luttinger liquids. <i>Physical Review B</i> , 2017, 95, .	1.1	3
31	Weyl orbits without an external magnetic field. <i>Physical Review B</i> , 2020, 101, .	1.1	3
32	Transport in Topological Insulator Nanowires. <i>Springer Series in Solid-state Sciences</i> , 2018, , 93-114.	0.3	2
33	Bending strain in 3D topological semi-metals. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 084001.	1.3	2
34	Pumping conductance, the intrinsic anomalous Hall effect, and statistics of topological invariants. <i>Physical Review B</i> , 2015, 91, .	1.1	1