Adolfo G G Grushin

List of Publications by Year
in descending order

64	4,312	117625	118850
papers	citations	34 h-index	62 g-index

64	64	64	4094
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quantized circular photogalvanic effect in Weyl semimetals. Nature Communications, 2017, 8, 15995.	12.8	431
2	Negative magnetoresistance without well-defined chirality in the Weyl semimetal TaP. Nature Communications, 2016, 7, 11615.	12.8	429
3	Novel effects of strains in graphene and other two dimensional materials. Physics Reports, 2016, 617, 1-54.	25.6	315
4	Experimental signatures of the mixed axialâ€“gravitational anomaly in the Weyl semimetal NbP. Nature, 2017, 547, 324-327.	27.8	222
5	Consequences of a condensed matter realization of Lorentz-violating QED in Weyl semi-metals. Physical Review D, 2012, 86, .	4.7	211
6	Floquet Fractional Chern Insulators. Physical Review Letters, 2014, 112, 156801.	7.8	211
7	Tunable Casimir Repulsion with Three-Dimensional Topological Insulators. Physical Review Letters, 2011, 106, 020403.	7.8	154
8	Detection of sub-MeV dark matter with three-dimensional Dirac materials. Physical Review D, 2018, 97, .	4.7	142
9	Inhomogeneous Weyl and Dirac Semimetals: Transport in Axial Magnetic Fields and Fermi Arc Surface States from Pseudo-Landau Levels. Physical Review X, 2016, 6, .	8.9	125
10	Chiral optical response of multifold fermions. Physical Review B, 2018, 98, .	3.2	118
11	Condensed matter realization of the axial magnetic effect. Physical Review B, 2014, 89, .	3.2	117
12	Giant topological longitudinal circular photo-galvanic effect in the chiral multifold semimetal CoSi. Nature Communications, 2021, 12, 154.	12.8	89
13	Resonance-enhanced optical nonlinearity in the Weyl semimetal TaAs. Physical Review B, 2018, 98, .	3.2	83
14	Magnetism and anomalous transport in the Weyl semimetal PrAlGe: possible route to axial gauge fields. Npj Quantum Materials, 2020, 5, .	5.2	78
15	Pseudo-electromagnetic fields in 3D topological semimetals. Nature Reviews Physics, 2020, 2, 29-41.	26.6	76
16	Probing topology by â€œheatingâ€: Quantized circular dichroism in ultracold atoms. Science Advances, 2017, 3, e1701207.	10.3	71
17	Topology and geometry under the nonlinear electromagnetic spotlight. Nature Materials, 2021, 20, 1601-1614.	27.5	71
18	Charge instabilities and topological phases in the extended Hubbard model on the honeycomb lattice with enlarged unit cell. Physical Review B, 2013, 87, .	3.2	70

#	Article	IF	Citations
19	Renormalization of Coulomb interaction in graphene: Determining observable quantities. Physical Review B, 2010, 82, .	3.2	69
20	Repulsive Casimir Effect with Chern Insulators. Physical Review Letters, 2014, 112, 056804.	7.8	69
21	Effect of finite temperature and uniaxial anisotropy on the Casimir effect with three-dimensional topological insulators. Physical Review B, 2011, 84, .	3.2	65
22	Interaction-driven phases in the half-filled honeycomb lattice: An infinite density matrix renormalization group study. Physical Review B, 2015, 92, .	3.2	65
23	Enhancing the stability of a fractional Chern insulator against competing phases. Physical Review B, 2012, 86, .	3.2	60
24	Interaction-driven phases in the half-filled spinless honeycomb lattice from exact diagonalization. Physical Review B, 2013, 88, .	3.2	59
25	Effect of Coulomb interactions on the optical properties of doped graphene. Physical Review B, 2009, 80, .	3.2	53
26	Characterization and stability of a fermionic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î½</mml:mi><mml:mo>=</mml:mo><mml:mn>1</mml:mn> Chern insulator. Physical Review B, 2015, 91, .	3.2	51
27	Difference frequency generation in topological semimetals. Physical Review Research, 2020, 2, .	3.6	51
28	Linear and nonlinear optical responses in the chiral multifold semimetal RhSi. Npj Quantum Materials, 2020, 5, .	5.2	50
29	Topological Fermi Liquids from Coulomb Interactions in the Doped Honeycomb Lattice. Physical Review Letters, 2011, 107, 106402.	7.8	48
30	Visualizing the chiral anomaly in Dirac and Weyl semimetals with photoemission spectroscopy. Physical Review B, 2016, 93, .	3.2	45
31	Guided accumulation of active particles by topological design of a second-order skin effect. Nature Communications, 2021, 12, 4691.	12.8	44
32	Linear optical conductivity of chiral multifold fermions. Physical Review B, 2019, 99, .	3.2	39
33	Quantization in Chiral Higher Order Topological Insulators: Circular Dichroism and Local Chern Marker. Physical Review Letters, 2019, 123, 247401.	7.8	37
34	Optical signatures of multifold fermions in the chiral topological semimetal CoSi. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 27104-27110.	7.1	37
35	Topological Weaireâ€“Thorpe models of amorphous matter. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30260-30265.	7.1	34
36	Thermal transport, geometry, and anomalies. Physics Reports, 2022, 977, 1-58.	25.6	34

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37	Tunable axial gauge fields in engineered Weyl semimetals: semiclassical analysis and optical lattice implementations. 2D Materials, 2018, 5, 024001.	4.4	32
38	Dynamical Piezoelectric and Magnetopiezoelectric Effects in Polar Metals from Berry Phases and Orbital Moments. Physical Review Letters, 2016, 117, 257601.	7.8	30
39	Landau levels, Bardeen polynomials, and Fermi arcs in Weyl semimetals: Lattice-based approach to the chiral anomaly. Physical Review B, 2019, 99, .	3.2	30
40	Imaging tunable quantum Hall broken-symmetry orders in graphene. Nature, 2022, 605, 51-56.	27.8	30
41	Topological insulating phases in monolayer and bilayer graphene: An effective action approach. Physical Review B, 2010, 82, .	3.2	27
42	Theory of a 3+1D fractional chiral metal: Interacting variant of the Weyl semimetal. Physical Review B, 2016, 94, .	3.2	26
43	Anisotropic electrical and thermal magnetotransport in the magnetic semimetal GdPtBi. Physical Review B, 2020, 101, .	3.2	24
44	Coexistence of Fermi arcs with two-dimensional gapless Dirac states. Physical Review B, 2015, 91, .	3.2	23
45	Entanglement spectrum crossings reveal non-Hermitian dynamical topology. Physical Review Research, 2021, 3, .	3.6	21
46	Strong bulk photovoltaic effect in chiral crystals in the visible spectrum. Physical Review B, 2019, 100, .	3.2	18
47	Nodal-line semimetals from Weyl superlattices. Physical Review B, 2017, 96, .	3.2	16
48	Charge Excitation Dynamics in Bosonic Fractional Chern Insulators. Physical Review Letters, 2018, 121, 086401.	7.8	16
49	Chern numbers and chiral anomalies in Weyl butterflies. Physical Review B, 2016, 94, .	3.2	13
50	Finite-frequency magnetoelectric response of three-dimensional topological insulators. Physical Review B, 2012, 86, .	3.2	12
51	Second-harmonic generation in the topological multifold semimetal RhSi. Physical Review Research, 2022, 4, .	3.6	10
52	Unparticle mediated superconductivity. New Journal of Physics, 2015, 17, 033039.	2.9	9
53	Spectral and optical properties of Ag₃Au(Se₂,Te₂) and dark matter detection. JPhys Materials, 2020, 3, 014001.	4.2	9
54	Interacting stochastic topology and Mott transition from light response. Physical Review B, 2021, 103, .	3.2	9

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55	Response of fermions in Chern bands to spatially local quenches. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 083103.	2.3	7
56	Wave-packet dynamics on Chern-band lattices in a trap. Physical Review A, 2015, 92, .	2.5	6
57	How to Make Devices with Weyl Materials. Physics Magazine, 2017, 10, .	0.1	6
58	AKLT-States as ZX-Diagrams: Diagrammatic Reasoning for Quantum States. PRX Quantum, 2022, 3, .	9.2	4
59	Fermionic dualities with axial gauge fields. Physical Review B, 2020, 102, .	3.2	3
60	Conservation of chirality at a junction between two Weyl semimetals. Physical Review B, 2021, 104, .	3.2	3
61	Three-dimensional chiral Veselago lensing. Physical Review B, 2022, 105, .	3.2	3
62	Bending strain in 3D topological semi-metals. Journal Physics D: Applied Physics, 2022, 55, 084001.	2.8	2
63	Publisher's Note: Topological insulating phases in monolayer and bilayer graphene: An effective action approach [Phys. Rev. B82, 195438 (2010)]. Physical Review B, 2010, 82, .	3.2	0
64	Common and Not-So-Common High-Energy Theory Methods for Condensed Matter Physics. Springer Series in Solid-state Sciences, 2018, , 149-175.	0.3	0