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	Bending strain in 3D topological semi-metals. Journal Physics D: Applied Physics, 2022, 55, 084001.	2.8	2
2	AKLT-States as ZX-Diagrams: Diagrammatic Reasoning for Quantum States. PRX Quantum, 2022, 3, .	9.2	4
3	Three-dimensional chiral Veselago lensing. Physical Review B, 2022, 105, .	3.2	3
4	Second-harmonic generation in the topological multifold semimetal RhSi. Physical Review Research, 2022, 4, .	3.6	10
5	Imaging tunable quantum Hall broken-symmetry orders in graphene. Nature, 2022, 605, 51-56.	27.8	30
6	Thermal transport, geometry, and anomalies. Physics Reports, 2022, 977, 1-58.	25.6	34
7	Interacting stochastic topology and Mott transition from light response. Physical Review B, 2021, 103, .	3.2	9
8	Giant topological longitudinal circular photo-galvanic effect in the chiral multifold semimetal CoSi. Nature Communications, 2021, 12, 154.	12.8	89
9	Topology and geometry under the nonlinear electromagnetic spotlight. Nature Materials, 2021, 20, 1601-1614.	27.5	71
10	Entanglement spectrum crossings reveal non-Hermitian dynamical topology. Physical Review Research, 2021, 3, .	3.6	21
11	Guided accumulation of active particles by topological design of a second-order skin effect. Nature Communications, 2021, 12, 4691.	12.8	44
12	Conservation of chirality at a junction between two Weyl semimetals. Physical Review B, 2021, 104, .	3.2	3
13	Spectral and optical properties of Ag₃Au(Se₂,Te₂) and dark matter detection. JPhys Materials, 2020, 3, 014001.	4.2	9
14	Pseudo-electromagnetic fields in 3D topological semimetals. Nature Reviews Physics, 2020, 2, 29-41.	26.6	76
15	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
16	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
17	Fermionic dualities with axial gauge fields. Physical Review B, 2020, 102, .	3.2	3
18	Anisotropic electrical and thermal magnetotransport in the magnetic semimetal GdPtBi. Physical Review B, 2020, 101, .	3.2	24

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19	Magnetism and anomalous transport in the Weyl semimetal PrAlGe: possible route to axial gauge fields. Npj Quantum Materials, 2020, 5, .	5.2	78
20	Linear and nonlinear optical responses in the chiral multifold semimetal RhSi. Npj Quantum Materials, 2020, 5, .	5.2	50
21	Difference frequency generation in topological semimetals. Physical Review Research, 2020, 2, .	3.6	51
22	Linear optical conductivity of chiral multifold fermions. Physical Review B, 2019, 99, .	3.2	39
23	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
24	Strong bulk photovoltaic effect in chiral crystals in the visible spectrum. Physical Review B, 2019, 100, .	3.2	18
25	Quantization in Chiral Higher Order Topological Insulators: Circular Dichroism and Local Chern Marker. Physical Review Letters, 2019, 123, 247401.	7.8	37
26	Detection of sub-MeV dark matter with three-dimensional Dirac materials. Physical Review D, 2018, 97, .	4.7	142
27	Tunable axial gauge fields in engineered Weyl semimetals: semiclassical analysis and optical lattice implementations. 2D Materials, 2018, 5, 024001.	4.4	32
28	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
29	Resonance-enhanced optical nonlinearity in the Weyl semimetal TaAs. Physical Review B, 2018, 98, .	3.2	83
30	Chiral optical response of multifold fermions. Physical Review B, 2018, 98, .	3.2	118
31	Charge Excitation Dynamics in Bosonic Fractional Chern Insulators. Physical Review Letters, 2018, 121, 086401.	7.8	16
32	Probing topology by â€œheatingâ€: Quantized circular dichroism in ultracold atoms. Science Advances, 2017, 3, e1701207.	10.3	71
33	Experimental signatures of the mixed axialâ€“gravitational anomaly in the Weyl semimetal NbP. Nature, 2017, 547, 324-327.	27.8	222
34	Quantized circular photogalvanic effect in Weyl semimetals. Nature Communications, 2017, 8, 15995.	12.8	431
35	Nodal-line semimetals from Weyl superlattices. Physical Review B, 2017, 96, .	3.2	16
36	How to Make Devices with Weyl Materials. Physics Magazine, 2017, 10, .	0.1	6

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37	Response of fermions in Chern bands to spatially local quenches. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 083103.	2.3	7
38	Negative magnetoresistance without well-defined chirality in the Weyl semimetal TaP. Nature Communications, 2016, 7, 11615.	12.8	429
39	Dynamical Piezoelectric and Magnetopiezoelectric Effects in Polar Metals from Berry Phases and Orbital Moments. Physical Review Letters, 2016, 117, 257601.	7.8	30
40	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
41	Visualizing the chiral anomaly in Dirac and Weyl semimetals with photoemission spectroscopy. Physical Review B, 2016, 93, .	3.2	45
42	Theory of a 3+1D fractional chiral metal: Interacting variant of the Weyl semimetal. Physical Review B, 2016, 94, .	3.2	26
43	Chern numbers and chiral anomalies in Weyl butterflies. Physical Review B, 2016, 94, .	3.2	13
44	Novel effects of strains in graphene and other two dimensional materials. Physics Reports, 2016, 617, 1-54.	25.6	315
45	Wave-packet dynamics on Chern-band lattices in a trap. Physical Review A, 2015, 92, .	2.5	6
46	Interaction-driven phases in the half-filled honeycomb lattice: An infinite density matrix renormalization group study. Physical Review B, 2015, 92, .	3.2	65
47	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></mml:mrow></mml:math> Chern insulator. Physical Review B, 2015, 91, .	3.2	51
48	Coexistence of Fermi arcs with two-dimensional gapless Dirac states. Physical Review B, 2015, 91, .	3.2	23
49	Unparticle mediated superconductivity. New Journal of Physics, 2015, 17, 033039.	2.9	9
50	Repulsive Casimir Effect with Chern Insulators. Physical Review Letters, 2014, 112, 056804.	7.8	69
51	Floquet Fractional Chern Insulators. Physical Review Letters, 2014, 112, 156801.	7.8	211
52	Condensed matter realization of the axial magnetic effect. Physical Review B, 2014, 89, .	3.2	117
53	Interaction-driven phases in the half-filled spinless honeycomb lattice from exact diagonalization. Physical Review B, 2013, 88, .	3.2	59
54	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

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55	Enhancing the stability of a fractional Chern insulator against competing phases. Physical Review B, 2012, 86, .	3.2	60
56	Consequences of a condensed matter realization of Lorentz-violating QED in Weyl semi-metals. Physical Review D, 2012, 86, .	4.7	211
57	Finite-frequency magnetoelectric response of three-dimensional topological insulators. Physical Review B, 2012, 86, .	3.2	12
58	Tunable Casimir Repulsion with Three-Dimensional Topological Insulators. Physical Review Letters, 2011, 106, 020403.	7.8	154
59	Effect of finite temperature and uniaxial anisotropy on the Casimir effect with three-dimensional topological insulators. Physical Review B, 2011, 84, .	3.2	65
60	Topological Fermi Liquids from Coulomb Interactions in the Doped Honeycomb Lattice. Physical Review Letters, 2011, 107, 106402.	7.8	48
61	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
62	Topological insulating phases in monolayer and bilayer graphene: An effective action approach. Physical Review B, 2010, 82, .	3.2	27
63	Renormalization of Coulomb interaction in graphene: Determining observable quantities. Physical Review B, 2010, 82, .	3.2	69
64	Effect of Coulomb interactions on the optical properties of doped graphene. Physical Review B, 2009, 80, .	3.2	53