Bitan Roy

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

71 2,017 27 42 g-index

80 2,603 3.9 6.13 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
71	Theory of interacting electrons on the honeycomb lattice. <i>Physical Review B</i> , 2009 , 79,	3.3	201
70	Unconventional superconductivity on honeycomb lattice: Theory of Kekule order parameter. <i>Physical Review B</i> , 2010 , 82,	3.3	102
69	Unconventional superconductivity in nearly flat bands in twisted bilayer graphene. <i>Physical Review B</i> , 2019 , 99,	3.3	100
68	Higher-order topological phases: A general principle of construction. <i>Physical Review B</i> , 2019 , 99,	3.3	97
67	Dirty Weyl semimetals: Stability, phase transition, and quantum criticality. <i>Physical Review B</i> , 2016 , 93,	3.3	76
66	Interacting Weyl fermions: Phases, phase transitions, and global phase diagram. <i>Physical Review B</i> , 2017 , 95,	3.3	72
65	Diffusive quantum criticality in three-dimensional disordered Dirac semimetals. <i>Physical Review B</i> , 2014 , 90,	3.3	65
64	Quantum superconducting criticality in graphene and topological insulators. <i>Physical Review B</i> , 2013 , 87,	3.3	61
63	Magnetic catalysis and axionic charge density wave in Weyl semimetals. <i>Physical Review B</i> , 2015 , 92,	3.3	60
62	Universal optical conductivity of a disordered Weyl semimetal. Scientific Reports, 2016, 6, 32446	4.9	51
61	Interacting nodal-line semimetal: Proximity effect and spontaneous symmetry breaking. <i>Physical Review B</i> , 2017 , 96,	3.3	45
60	Surface theory of a family of topological Kondo insulators. <i>Physical Review B</i> , 2014 , 90,	3.3	44
59	Higher-order topological insulators in amorphous solids. <i>Physical Review Research</i> , 2020 , 2,	3.9	42
58	Strain-induced time-reversal odd superconductivity in graphene. <i>Physical Review B</i> , 2014 , 90,	3.3	39
57	Topological superconductivity of spin-3/2 carriers in a three-dimensional doped Luttinger semimetal. <i>Physical Review B</i> , 2019 , 99,	3.3	39
56	Emergent Lorentz symmetry near fermionic quantum critical points in two and three dimensions. Journal of High Energy Physics, 2016 , 2016, 1-19	5.4	38
55	Chiral symmetry breaking and the quantum Hall effect in monolayer graphene. <i>Physical Review B</i> , 2014 , 90,	3.3	38

(2019-2017)

54	Competing orders and topology in the global phase diagram of pyrochlore iridates. <i>Physical Review B</i> , 2017 , 95,	3.3	37	
53	Theory of unconventional quantum Hall effect in strained graphene. <i>Physical Review B</i> , 2013 , 87,	3.3	36	
52	Quantum phases of interacting electrons in three-dimensional dirty Dirac semimetals. <i>Physical Review B</i> , 2016 , 94,	3.3	36	
51	Dissolution of topological Fermi arcs in a dirty Weyl semimetal. <i>Physical Review B</i> , 2017 , 96,	3.3	34	
50	Axionic superconductivity in three-dimensional doped narrow-gap semiconductors. <i>Physical Review B</i> , 2014 , 90,	3.3	34	
49	Multicritical behavior of Z2Φ(2) Gross-Neveu-Yukawa theory in graphene. <i>Physical Review B</i> , 2011 , 84,	3.3	33	
48	Continuous and discontinuous topological quantum phase transitions. <i>Physical Review B</i> , 2016 , 94,	3.3	31	
47	Global Phase Diagram of a Dirty Weyl Liquid and Emergent Superuniversality. <i>Physical Review X</i> , 2018 , 8,	9.1	31	
46	Weyl fermions with arbitrary monopoles in magnetic fields: Landau levels, longitudinal magnetotransport, and density-wave ordering. <i>Physical Review B</i> , 2016 , 94,	3.3	28	
45	Quantum critical scaling in magnetic field near the Dirac point in graphene. <i>Physical Review B</i> , 2008 , 77,	3.3	27	
44	Quantum Multicriticality near the Dirac-Semimetal to Band-Insulator Critical Point in Two Dimensions: A Controlled Ascent from One Dimension. <i>Physical Review X</i> , 2018 , 8,	9.1	26	
43	Topological insulators in strained graphene at weak interaction. <i>Physical Review B</i> , 2013 , 88,	3.3	25	
42	Out of equilibrium higher-order topological insulator: Floquet engineering and quench dynamics. <i>Physical Review Research</i> , 2019 , 1,	3.9	24	
41	Migdal's theorem and electron-phonon vertex corrections in Dirac materials. <i>Physical Review B</i> , 2014 , 89,	3.3	22	
40	Odd integer quantum Hall effect in graphene. <i>Physical Review B</i> , 2011 , 84,	3.3	22	
39	Inhomogeneous magnetic catalysis on graphene∃ honeycomb lattice. <i>Physical Review B</i> , 2011 , 83,	3.3	22	
38	Magnetotransport in multi-Weyl semimetals: a kinetic theory approach. <i>Journal of High Energy Physics</i> , 2018 , 2018, 1	5.4	21	
37	Antiunitary symmetry protected higher-order topological phases. <i>Physical Review Research</i> , 2019 , 1,	3.9	19	

36	Zero Modes and Global Antiferromagnetism in Strained Graphene. <i>Physical Review X</i> , 2014 , 4,	9.1	18
35	Classification of massive and gapless phases in bilayer graphene. <i>Physical Review B</i> , 2013 , 88,	3.3	18
34	Bilayer graphene with parallel magnetic field and twisting: Phases and phase transitions in a highly tunable Dirac system. <i>Physical Review B</i> , 2013 , 88,	3.3	18
33	From Birefringent Electrons to a Marginal or Non-Fermi Liquid of Relativistic Spin-1/2 Fermions: An Emergent Superuniversality. <i>Physical Review Letters</i> , 2018 , 121, 157602	7.4	17
32	Magnetic-field induced inequivalent vortex zero modes in strained graphene. <i>Physical Review B</i> , 2012 , 85,	3.3	15
31	Asymmetric spatial structure of zero modes for birefringent Dirac fermions. <i>Physical Review B</i> , 2012 , 85,	3.3	15
30	Theory of integer quantum Hall effect in insulating bilayer graphene. <i>Physical Review B</i> , 2014 , 89,	3.3	14
29	Excitonic and nematic instabilities on the surface of topological Kondo insulators. <i>Physical Review B</i> , 2015 , 92,	3.3	14
28	Non-Abelian anomalies in multi-Weyl semimetals. <i>Physical Review Research</i> , 2020 , 2,	3.9	14
27	Global Phase Diagram of a Three-Dimensional Dirty Topological Superconductor. <i>Physical Review Letters</i> , 2017 , 118, 227002	7.4	12
26	Dirty higher-order Dirac semimetal: Quantum criticality and bulk-boundary correspondence. <i>Physical Review Research</i> , 2020 , 2,	3.9	11
25	Fermionic multicriticality near Kekul Valence-bond ordering on a honeycomb lattice. <i>Physical Review B</i> , 2019 , 99,	3.3	10
24	Strain-engineered higher-order topological phases for spin-32 Luttinger fermions. <i>Physical Review B</i> , 2020 , 101,	3.3	10
23	Z2 index for gapless fermionic modes in the vortex core of three-dimensional paired Dirac fermions. <i>Physical Review B</i> , 2014 , 89,	3.3	10
22	Unifying Interacting Nodal Semimetals: A New Route to Strong Coupling. <i>Physical Review Letters</i> , 2019 , 123, 207601	7.4	10
21	Itinerant quantum multicriticality of two-dimensional Dirac fermions. <i>Physical Review B</i> , 2018 , 97,	3.3	10
20	Higher-order topological superconductors in P-, T-odd quadrupolar Dirac materials. <i>Physical Review B</i> , 2020 , 101,	3.3	9
19	Optical conductivity of an interacting Weyl liquid in the collisionless regime. <i>Physical Review B</i> , 2017 , 96,	3.3	8

18	Topolectric circuits: Theory and construction. <i>Physical Review Research</i> , 2021 , 3,	3.9	8
17	Extended Hubbard model in undoped and doped monolayer and bilayer graphene: Selection rules and organizing principle among competing orders. <i>Physical Review B</i> , 2021 , 103,	3.3	7
16	Generalized triple-component fermions: Lattice model, Fermi arcs, and anomalous transport. <i>Physical Review B</i> , 2019 , 100,	3.3	7
15	Competing charge-density wave, magnetic, and topological ground states at and near Dirac points in graphene in axial magnetic fields. <i>Physical Review B</i> , 2014 , 90,	3.3	6
14	Conserved charges of order-parameter textures in Dirac systems. <i>Physical Review B</i> , 2012 , 86,	3.3	6
13	Hierarchy of higher-order Floquet topological phases in three dimensions. <i>Physical Review B</i> , 2021 , 103,	3.3	6
12	Collisionless Transport Close to a Fermionic Quantum Critical Point in Dirac Materials. <i>Physical Review Letters</i> , 2018 , 121, 137601	7.4	6
11	Ferromagnetism and glassiness on the surface of topological insulators. <i>Physical Review B</i> , 2016 , 94,	3.3	5
10	Spontaneous symmetry breaking and quantum Hall valley ordering on the surface of topological hexaborides. <i>Physical Review B</i> , 2015 , 92,	3.3	4
9	Dislocation as a bulk probe of higher-order topological insulators. <i>Physical Review Research</i> , 2021 , 3,	3.9	4
8	Interacting spin-32 fermions in a Luttinger semimetal: Competing phases and their selection in the global phase diagram. <i>Physical Review B</i> , 2021 , 103,	3.3	3
7	Shear viscosity as a probe of nodal topology. <i>Physical Review B</i> , 2020 , 101,	3.3	3
6	Emergent chiral symmetry in a three-dimensional interacting Dirac liquid. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	3
5	Anomalous and normal dislocation modes in Floquet topological insulators. <i>Communications Physics</i> , 2021 , 4,	5.4	3
4	Metals, fractional metals, and superconductivity in rhombohedral trilayer graphene. <i>Physical Review B</i> , 2022 , 105,	3.3	2
3	Relativistic non-Fermi liquid from interacting birefringent fermions: A robust superuniversality. <i>Physical Review Research</i> , 2020 , 2,	3.9	2
2	Half vortex and fractional electrical charge in two dimensions. <i>Physical Review B</i> , 2016 , 93,	3.3	1
1	Emergent Lorentz symmetry near fermionic quantum critical points in two and three dimensions 2016 , 2016, 1		1