Ajit Coimbatore Balram

List of Publications by Year
in descending order

43	885	471509 17	477307 29
papers	citations	h-index	g-index

43	43	43	467
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Transitions from Abelian composite fermion to non-Abelian parton fractional quantum Hall states in the zeroth Landau level of bilayer graphene. Physical Review B, 2022, 105, .	3.2	11
2	Very-High-Energy Collective States of Partons in Fractional Quantum Hall Liquids. Physical Review X, 2022, 12, .	8.9	12
3	Prethermalization and entanglement dynamics in interacting topological pumps. Physical Review B, 2022, 105, .	3.2	5
4	Revisiting excitation gaps in the fractional quantum Hall effect. Physical Review B, 2022, 105, .	3.2	3
5	Nature of the anomalous <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>4</mml:mn><mml:mo>/</mml:mo><mml:mn>13</mml:mn> fractional quantum Hall effect in graphene. Physical Review B, 2022, 105, .	3.2	7
6	Elementary excitations in fractional quantum Hall effect from classical constraints. New Journal of Physics, 2021, 23, 013001.	2.9	13
7	Unconventional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="double-struck">Z</mml:mi><mml:mi>n</mml:mi></mml:msub></mml:math> parton states at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>ν</mml:mi><mml:mo>=</mml:mo><mml:mn>7</mml:mn> . Role of finite width. Physical Review B, 2021, 103, .	3.2	15
8	Quench Dynamics of Collective Modes in Fractional Quantum Hall Bilayers. Physical Review Letters, 2021, 126, 076604.	7.8	14
9	Origin of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>ν</mml:mi><mml:mo>=</mml:mo><mml:mn>1</mml:mn> fractional quantum Hall effect in wide quantum wells. Physical Review B, 2021, 103, .	3.2	9
10	Abelian parton state for the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>ν</mml:mi><mml:mo>=</mml:mo><mml:mn>4</mml:mn> fractional quantum Hall effect. Physical Review B, 2021, 103, .	3.2	12
11	A non-Abelian parton state for the $ν=2+3/8$ fractional quantum Hall effect. SciPost Physics, 2021, 10, .	4.9	16
12	Parton wave function for the fractional quantum Hall effect at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>ν</mml:mi><mml:mo>=</mml:mo><mml:mn>6</mml:mn> Physical Review Research, 2021, 3, .	3.6	9
13	Theoretical phase diagram of two-component composite fermions in double-layer graphene. Physical Review B, 2020, 101, .	3.2	7
14	Interplay between fractional quantum Hall liquid and crystal phases at low filling. Physical Review B, 2020, 102, .	3.2	12
15	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="double-struck">Z</mml:mi><mml:mi>n</mml:mi></mml:msub></mml:math> superconductivity of composite bosons and the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>7</mml:mn><mml:mo>/</mml:mo><mml:mn>3</mml:mn> fractional quantum Hall effect. Physical Review Research, 2020, 2, .	3.6	23
16	Fractional quantum Hall effect at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>ν</mml:mi><mml:mo>=</mml:mo><mml:mn>2</mml:mn> Physical Review Research, 2020, 2, .	3.6	21
17	Non-Abelian fractional quantum Hall state at 3/7 -filled Landau level. Physical Review Research, 2020, 2, .	3.6	15
18	Prediction of a Non-Abelian Fractional Quantum Hall State with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>f</mml:mi></mml:math> -Wave Pairing of Composite Fermions in Wide Quantum Wells. Physical Review Letters, 2019, 123, 016802.	7.8	37

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19	Parton construction of particle-hole-conjugate Read-Rezayi parafermion fractional quantum Hall states and beyond. Physical Review B, 2019, 99, .	3.2	23
20	Charge and spin textures of Ising quantum Hall ferromagnet domain walls. Physical Review B, 2019, 100, .	3.2	2
21	Current-Induced Gap Opening in Interacting Topological Insulator Surfaces. Physical Review Letters, 2019, 123, 246803.	7.8	12
22	Even denominator fractional quantum Hall states in higher Landau levels of graphene. Nature Physics, 2019, 15, 154-158.	16.7	76
23	Fractional Quantum Hall Effect at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î½</mml:mi><mml:mo>=</mml:mo><mml:mn>2</mml:mn><mml:mo>+</mml:mo><mml:mi><mml:mo stretchy="false">/</mml:mo><mml:mn>13</mml:mn></mml:mrow></mml:math> : The Parton Paradigm for the Second Landau Level. Physical Review Letters, 2018, 121, 186601.	7.8	25
24	Parton construction of a wave function in the anti-Pfaffian phase. Physical Review B, 2018, 98, .	3.2	60
25	The enigma of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î½</mml:mi><mml:mo>=</mml:mo><mml:mn>12</mml:mn></mml:mrow></mml:math> quantum Hall effect. Physical Review B, 2017, 95, .	3.2	12
26	Fermi wave vector for the partially spin-polarized composite-fermion Fermi sea. Physical Review B, 2017, 96, .	3.2	24
27	Positions of the magnetoroton minima in the fractional quantum Hall effect. European Physical Journal B, 2017, 90, 1.	1.5	15
28	Particle-hole symmetry for composite fermions: An emergent symmetry in the fractional quantum Hall effect. Physical Review B, 2017, 96, .	3.2	14
29	Interacting composite fermions: Nature of the 4/5, 5/7, 6/7, and 6/17 fractional quantum Hall states. Physical Review B, 2016, 94, .	3.2	12
30	Exact results for model wave functions of anisotropic composite fermions in the fractional quantum Hall effect. Physical Review B, 2016, 93, .	3.2	30
31	Robustness of topological surface states against strong disorder observed in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">i</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">T</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>nanotubes.	3.2	18
32	Nature of composite fermions and the role of particle-hole symmetry: A microscopic account. Physical Review B, 2016, 93, .	3.2	55
33	Phase diagram of fractional quantum Hall effect of composite fermions in multicomponent systems. Physical Review B, 2015, 91, .	3.2	34
34	Fractional quantum Hall effect in graphene: Quantitative comparison between theory and experiment. Physical Review B, 2015, 92, .	3.2	53
35	Spontaneous polarization of composite fermions in the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>n</mml:mi><mml:mo>=</mml:mo><mml:mn>3</mml:mn></mml:mrow></mml:math> level of graphene. Physical Review B, 2015, 92, .	3.2	32
36	Luttinger Theorem for the Strongly Correlated Fermi Liquid of Composite Fermions. Physical Review Letters, 2015, 115, 186805.	7.8	46

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37	Fractionally charged skyrmions in fractional quantum Hall effect. Nature Communications, 2015, 6, 8981.	12.8	10
38	Collective excitations of a system of coupled relativistic and nonrelativistic two-dimensional electron gases. Physical Review B, 2014, 90, .	3.2	3
39	Role of interedge tunneling in localizing Majorana zero modes at the ends of quasi-one-dimensional<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>p</mml:mi><mml:mo>+</mml:mo><mml:mi>i</mml:mi><mml:mi>p</mml:mi></mml:mrow> Physical Review B, 2013, 88, .	3.2	1
40	State counting for excited bands of the fractional quantum Hall effect: Exclusion rules for bound excitons. Physical Review B, 2013, 88, .	3.2	31
41	Role of Exciton Screening in the7/3Fractional Quantum Hall Effect. Physical Review Letters, 2013, 110, 186801.	7.8	46
42	Non-perturbative corrections to mean-field critical behavior: the spherical model on a spider-web graph. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 125006.	2.1	1
43	Scaling relation for determining the critical threshold for continuum percolation of overlapping discs of two sizes. Pramana - Journal of Physics, 2010, 74, 109-114.	1.8	8