Alexander G Abanov

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/10936174/publications.pdf

Version: 2024-02-01

38 papers 1,600 citations

331670 21 h-index 315739 38 g-index

38 all docs 38 docs citations

38 times ranked 1009 citing authors

#	Article	IF	CITATIONS
1	Odd viscosity in chiral active fluids. Nature Communications, 2017, 8, 1573.	12.8	184
2	Electromagnetic and gravitational responses of two-dimensional noninteracting electrons in a background magnetic field. Physical Review B, 2014, 90, .	3.2	118
3	Framing Anomaly in the Effective Theory of the Fractional Quantum Hall Effect. Physical Review Letters, 2015, 114, 016805.	7.8	101
4	Thermal Hall Effect and Geometry with Torsion. Physical Review Letters, 2015, 114, 016802.	7.8	95
5	Flat spin-wave dispersion in a triangular antiferromagnet. Physical Review B, 2006, 74, .	3.2	84
6	Quantum Hydrodynamics, the Quantum Benjamin-Ono Equation, and the Calogero Model. Physical Review Letters, 2005, 95, 076402.	7.8	79
7	Odd viscosity in two-dimensional incompressible fluids. Physical Review Fluids, 2017, 2, .	2.5	79
8	Density-Curvature Response and Gravitational Anomaly. Physical Review Letters, 2014, 113, 266802.	7.8	76
9	Nonlinear Quantum Shock Waves in Fractional Quantum Hall Edge States. Physical Review Letters, 2006, 97, 246401.	7.8	72
10	Anomalous Hydrodynamics of Two-Dimensional Vortex Fluids. Physical Review Letters, 2014, 113, 034501.	7.8	69
11	Integrable hydrodynamics of Calogero–Sutherland model: bidirectional Benjamin–Ono equation. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 135201.	2.1	63
12	Boundary Effective Action for Quantum Hall States. Physical Review Letters, 2016, 116, 126802.	7.8	62
13	Asymptotics of Toeplitz determinants and the emptiness formation probability for the XY spin chain. Journal of Physics A, 2005, 38, 5069-5095.	1.6	52
14	Characterizing correlations with full counting statistics: Classical Ising and quantum <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>X</mml:mi><mml:mi>Y</mml:mi></mml:mrow></mml:math> spin chains. Physical Review E, 2013, 87, 022114.	2.1	43
15	Factorization of quantum charge transport for noninteracting fermions. Physical Review B, 2009, 79, .	3.2	38
16	Quantum fluctuations of one-dimensional free fermions and Fisher–Hartwig formula for Toeplitz determinants. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 485001.	2.1	35
17	Hydrodynamics of cold atomic gases in the limit of weak nonlinearity, dispersion, and dissipation. Physical Review A, 2012, 86, .	2.5	35
18	Emptiness formation probability for the anisotropic XY spin chain in a magnetic field. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 316, 342-349.	2.1	28

#	Article	IF	Citations
19	On the effective hydrodynamics of the fractional quantum Hall effect. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 292001.	2.1	28
20	Lifetime of Almost Strong Edge-Mode Operators in One-Dimensional, Interacting, Symmetry Protected Topological Phases. Physical Review Letters, 2020, 124, 206803.	7.8	25
21	On the probability of ferromagnetic strings in antiferromagnetic spin chains. Nuclear Physics B, 2002, 647, 565-580.	2.5	23
22	Dynamics of almost strong edge modes in spin chains away from integrability. Physical Review B, 2020, 102 , .	3.2	21
23	Counting free fermions on a line: a Fisher–Hartwig asymptotic expansion for the Toeplitz determinant in the double-scaling limit. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 085003.	2.1	19
24	Hopf term induced by fermions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 492, 321-323.	4.1	17
25	Hydrodynamics with gauge anomaly: Variational principle and Hamiltonian formulation. Physical Review D, 2015, 91, .	4.7	15
26	Long-lived period-doubled edge modes of interacting and disorder-free Floquet spin chains. Communications Physics, 2022, 5, .	5. 3	15
27	Magnetotransport in Dirac metals: Chiral magnetic effect and quantum oscillations. Physical Review B, 2015, 92, .	3.2	14
28	Free-Surface Variational Principle for an Incompressible Fluid with Odd Viscosity. Physical Review Letters, 2019, 122, 154501.	7.8	14
29	Quantum electrical dipole in triangular systems: A model for spontaneous polarity in metal clusters. Physical Review A, 2005, 71, .	2.5	13
30	Hydrodynamics of two-dimensional compressible fluid with broken parity: Variational principle and free surface dynamics in the absence of dissipation. Physical Review Fluids, 2020, 5, .	2.5	13
31	Double occupancy errors in quantum computing operations: Corrections to adiabaticity. Physical Review B, 2005, 71, .	3.2	11
32	HYDRODYNAMICS OF CORRELATED SYSTEMS. NATO Science Series Series II, Mathematics, Physics and Chemistry, 2006, , 139-161.	0.1	11
33	Cold Fermi gas with inverse square interaction in a harmonic trap. Nuclear Physics B, 2011, 846, 122-136.	2.5	10
34	Fisher–Hartwig expansion for Toeplitz determinants and the spectrum of a single-particle reduced density matrix for one-dimensional free fermions. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 375005.	2.1	10
35	Nonlinear dynamics of spin and charge in spin-Calogero model. Physical Review B, 2009, 80, .	3.2	9
36	Soliton solutions of a Calogero model in a harmonic potential. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 295203.	2.1	9

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37	Asymptotics of Toeplitz determinants and the emptiness formation probability for the XY spin chain. Journal of Physics A, 2006, 39, 14533-14534.	1.6	7
38	Topological Calculation of the Phase of the Determinant of a Non Self-Adjoint Elliptic Operator. Communications in Mathematical Physics, 2005, 259, 287-305.	2.2	3