Alexander G Abanov

List of Publications by Year
in descending order

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	Long-lived period-doubled edge modes of interacting and disorder-free Floquet spin chains. Communications Physics, 2022, 5, .	5.3	15
2	Dynamics of almost strong edge modes in spin chains away from integrability. Physical Review B, 2020, 102, .	3.2	21
3	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
4	Lifetime of Almost Strong Edge-Mode Operators in One-Dimensional, Interacting, Symmetry Protected Topological Phases. Physical Review Letters, 2020, 124, 206803.	7.8	25
5	Free-Surface Variational Principle for an Incompressible Fluid with Odd Viscosity. Physical Review Letters, 2019, 122, 154501.	7.8	14
6	Odd viscosity in chiral active fluids. Nature Communications, 2017, 8, 1573.	12.8	184
7	Odd viscosity in two-dimensional incompressible fluids. Physical Review Fluids, 2017, 2, .	2.5	79
8	Boundary Effective Action for Quantum Hall States. Physical Review Letters, 2016, 116, 126802.	7.8	62
9	Magnetotransport in Dirac metals: Chiral magnetic effect and quantum oscillations. Physical Review B, 2015, 92, .	3.2	14
10	Hydrodynamics with gauge anomaly: Variational principle and Hamiltonian formulation. Physical Review D, 2015, 91, .	4.7	15
11	Framing Anomaly in the Effective Theory of the Fractional Quantum Hall Effect. Physical Review Letters, 2015, 114, 016805.	7.8	101
12	Thermal Hall Effect and Geometry with Torsion. Physical Review Letters, 2015, 114, 016802.	7.8	95
13	Density-Curvature Response and Gravitational Anomaly. Physical Review Letters, 2014, 113, 266802.	7.8	76
14	Electromagnetic and gravitational responses of two-dimensional noninteracting electrons in a background magnetic field. Physical Review B, 2014, 90, .	3.2	118
15	Anomalous Hydrodynamics of Two-Dimensional Vortex Fluids. Physical Review Letters, 2014, 113, 034501.	7.8	69
16	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
17	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
18	On the effective hydrodynamics of the fractional quantum Hall effect. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 292001.	2.1	28

#	ARTICLE	IF	CITATIONS
19	Characterizing correlations with full counting statistics: Classical Ising and quantum XY spin chains. Physical Review E, 2013, 87, 022114.	2.1	43
20	Hydrodynamics of cold atomic gases in the limit of weak nonlinearity, dispersion, and dissipation. Physical Review A, 2012, 86, .	2.5	35
21	Cold Fermi gas with inverse square interaction in a harmonic trap. Nuclear Physics B, 2011, 846, 122-136.	2.5	10
22	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
23	Soliton solutions of a Calogero model in a harmonic potential. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 295203.	2.1	9
24	Factorization of quantum charge transport for noninteracting fermions. Physical Review B, 2009, 79, .	3.2	38
25	Nonlinear dynamics of spin and charge in spin-Calogero model. Physical Review B, 2009, 80, .	3.2	9
26	Integrable hydrodynamics of Calogero–Sutherland model: bidirectional Benjamin–Ono equation. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 135201.	2.1	63
27	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
28	Flat spin-wave dispersion in a triangular antiferromagnet. Physical Review B, 2006, 74, .	3.2	84
29	Nonlinear Quantum Shock Waves in Fractional Quantum Hall Edge States. Physical Review Letters, 2006, 97, 246401.	7.8	72
30	HYDRODYNAMICS OF CORRELATED SYSTEMS. NATO Science Series Series II, Mathematics, Physics and Chemistry, 2006, , 139-161.	0.1	11
31	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
32	Double occupancy errors in quantum computing operations: Corrections to adiabaticity. Physical Review B, 2005, 71, .	3.2	11
33	Quantum Hydrodynamics, the Quantum Benjamin-Ono Equation, and the Calogero Model. Physical Review Letters, 2005, 95, 076402.	7.8	79
34	Quantum electrical dipole in triangular systems: A model for spontaneous polarity in metal clusters. Physical Review A, 2005, 71, .	2.5	13
35	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
36	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
37	On the probability of ferromagnetic strings in antiferromagnetic spin chains. Nuclear Physics B, 2002, 647, 565-580.	2.5	23
38	Hopf term induced by fermions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2000, 492, 321-323.	4.1	17