Jean-SÃ©bastien Caux

List of Publications by Year
in descending order

57	4,075	136950 32	144013 57
papers	citations	h-index	g-index

57	57	57	1914
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Time Evolution of Local Observables After Quenching to an Integrable Model. Physical Review Letters, 2013, 110, 257203.	7.8	369
2	Complete Generalized Gibbs Ensembles in an Interacting Theory. Physical Review Letters, 2015, 115, 157201.	7.8	307
3	Quenching the Anisotropic Heisenberg Chain: Exact Solution and Generalized Gibbs Ensemble Predictions. Physical Review Letters, 2014, 113, 117202.	7.8	262
4	Fractional spinon excitations in the quantum Heisenberg antiferromagnetic chain. Nature Physics, 2013, 9, 435-441.	16.7	224
5	Solution for an interaction quench in the Lieb-Liniger Bose gas. Physical Review A, 2014, 89, .	2.5	198
6	Constructing the Generalized Gibbs Ensemble after a Quantum Quench. Physical Review Letters, 2012, 109, 175301.	7.8	186
7	Computation of Dynamical Correlation Functions of Heisenberg Chains in a Magnetic Field. Physical Review Letters, 2005, 95, 077201.	7.8	165
8	The Quench Action. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 064006.	2.3	147
9	Soliton Gases and Generalized Hydrodynamics. Physical Review Letters, 2018, 120, 045301.	7.8	143
10	Dynamical Spin Structure Factor for the Anisotropic Spin-1/2Heisenberg Chain. Physical Review Letters, 2006, 96, 257202.	7.8	138
11	Effect of covalent bonding on magnetism and the missing neutron intensity in copper oxide compounds. Nature Physics, 2009, 5, 867-872.	16.7	112
12	Interaction quenches in the one-dimensional Bose gas. Physical Review B, 2013, 88, .	3.2	105
13	Atomic spin-chain realization of a model for quantum criticality. Nature Physics, 2016, 12, 656-660.	16.7	104
14	Probing the Excitations of a Lieb-Liniger Gas from Weak to Strong Coupling. Physical Review Letters, 2015, 115, 085301.	7.8	95
15	Correlation Functions of the One-Dimensional Attractive Bose Gas. Physical Review Letters, 2007, 98, 150403.	7.8	88
16	Dynamical structure factor of one-dimensional Bose gases: Experimental signatures of beyond-Luttinger-liquid physics. Physical Review A, 2015, 91, .	2.5	83
17	Generalized TBA and generalized Gibbs. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 255001.	2.1	82
18	Computation of dynamical correlation functions of Heisenberg chains: the gapless anisotropic regime. Journal of Statistical Mechanics: Theory and Experiment, 2005, 2005, P09003-P09003.	2.3	80

#	Article	IF	Citations
19	Glimmers of a Quantum KAM Theorem: Insights from Quantum Quenches in One-Dimensional Bose Gases. Physical Review X, 2015, 5, .	8.9	79
20	Correlation functions of integrable models: A description of the <scp>ABACUS</scp> algorithm. Journal of Mathematical Physics, 2009, 50, .	1.1	73
21	Generalized Hydrodynamics with Space-Time Inhomogeneous Interactions. Physical Review Letters, 2019, 123, 130602.	7.8	72
22	Hydrodynamics of the interacting Bose gas in the Quantum Newton Cradle setup. SciPost Physics, 2019, 6, .	4.9	70
23	Orbital-exchange and fractional quantum number excitations in an f-electron metal, Yb ₂ Pt ₂ Pb. Science, 2016, 352, 1206-1210.	12.6	68
24	Finite-temperature correlations in the Lieb-Liniger one-dimensional Bose gas. Physical Review A, 2014, 89, .	2.5	67
25	Analytical expression for a post-quench time evolution of the one-body density matrix of one-dimensional hard-core bosons. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P12012.	2.3	58
26	Nonuniversal prefactors in the correlation functions of one-dimensional quantum liquids. Physical Review B, 2011, 84, .	3.2	53
27	Exact prefactors in static and dynamic correlation functions of one-dimensional quantum integrable models: Applications to the Calogero-Sutherland, Lieb-Liniger, and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>X</mml:mi><mml:mi>X</mml:mi><mml:mi>Z</mml:mi></mml:mrow></mml:math>models. Physical Review B, 2012, 85, .	3.2	53
28	Dynamics of the attractive 1D Bose gas: analytical treatment from integrability. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P08032-P08032.	2.3	51
29	Bethe ansatz approach to quench dynamics in the Richardson model. Journal of Mathematical Physics, 2009, 50, .	1.1	50
30	Exact mesoscopic correlation functions of the Richardson pairing model. Physical Review B, 2008, 77, .	3.2	43
31	Theory of superfluidity and drag force in the one-dimensional Bose gas. Frontiers of Physics, 2012, 7, 54-71.	5.0	38
32	Separation of Time Scales in a Quantum Newtonâ€™s Cradle. Physical Review Letters, 2016, 116, 225302.	7.8	34
33	Fredholm determinants, full counting statistics and Loschmidt echo for domain wall profiles in one-dimensional free fermionic chains. SciPost Physics, 2020, 8, .	4.9	31
34	Metastable Criticality and the Super Tonks-Girardeau Gas. Physical Review Letters, 2013, 110, 125302.	7.8	27
35	Motion of a Distinguishable Impurity in the Bose Gas: Arrested Expansion Without a Lattice and Impurity Snaking. Physical Review Letters, 2016, 116, 145302.	7.8	26
36	Quasi-soliton scattering in quantum spin chains. Physical Review B, 2015, 92, .	3.2	23

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37	Spin Polarization through Floquet Resonances in a Driven Central Spin Model. Physical Review Letters, 2018, 121, 080401.	7.8	23
38	Split Fermi seas in one-dimensional Bose fluids. Physical Review A, 2014, 89, .	2.5	21
39	Polarization suppression and nonmonotonic local two-body correlations in the two-component Bose gas in one dimension. Physical Review A, 2009, 80, .	2.5	18
40	Dynamics of azurite Cu<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>(CO<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mml:	3.2	18
41	Tracking the Effects of Interactions on Spinons in Gapless Heisenberg Chains. Physical Review Letters, 2011, 106, 217203.	7.8	17
42	Decay of superfluid currents in the interacting one-dimensional Bose gas. Physical Review A, 2009, 80, .	2.5	16
43	Dynamical correlation functions of the mesoscopic pairing model. Physical Review B, 2010, 81, .	3.2	16
44	Equilibrium thermodynamic properties of interacting two-component bosons in one dimension. Physical Review A, 2011, 84, .	2.5	16
45	Nonequilibrium phase transition in transport through a driven quantum point contact. Physical Review B, 2021, 103, .	3.2	15
46	Gold-induced nanowires on the Ge(100) surface yield a 2D and not a 1D electronic structure. Physical Review B, 2016, 93, .	3.2	13
47	Competing interactions in semiconductor quantum dots. Physical Review B, 2014, 90, .	3.2	12
48	General finite-size effects for zero-entropy states in one-dimensional quantum integrable models. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 495203.	2.1	12
49	Adiabatic formation of bound states in the one-dimensional Bose gas. Physical Review B, 2021, 103, .	3.2	12
50	Correlations of zero-entropy critical states in the XXZ model: integrability and Luttinger theory far from the ground state. SciPost Physics, 2016, 1, .	4.9	12
51	Variational method for integrability-breaking Richardson-Gaudin models. Physical Review B, 2017, 96, .	3.2	10
52	Out-of-equilibrium phase transitions induced by Floquet resonances in a periodically quench-driven XY spin chain. SciPost Physics Core, 2020, 3, .	2.8	10
53	Generalized hydrodynamics of the attractive non-linear SchrÓ§dinger equation. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 134001.	2.1	10
54	Driven impurity in an ultracold one-dimensional Bose gas with intermediate interaction strength. Physical Review A, 2016, 93, .	2.5	9

#	Article	IF	Citations
55	Transport between edge states in multilayer integer quantum Hall systems: Exact treatment of Coulomb interactions and disorder. Physical Review B, 2005, 72, .	3.2	5
56	Integrability and duality in spin chains. Physical Review B, 2019, 99, .	3.2	5
57	Celebrating Haldaneâ€™s â€˜Luttinger liquid theoryâ€™. Journal of Physics Condensed Matter, 2017, 29, 151001.	1.8	1