

Sylvain Nascimbene

List of Publications by Year in descending order

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papers

5,688
citations

201674

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265206

42
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all docs

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docs citations

42
times ranked

4363
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum simulations with ultracold quantum gases. Nature Physics, 2012, 8, 267-276.	16.7	1,612
2	Measuring the Chern number of Hofstadter bands with ultracold bosonic atoms. Nature Physics, 2015, 11, 162-166.	16.7	777
3	Experimental Realization of Strong Effective Magnetic Fields in an Optical Lattice. Physical Review Letters, 2011, 107, 255301.	7.8	629
4	Exploring the thermodynamics of a universal Fermi gas. Nature, 2010, 463, 1057-1060.	27.8	457
5	The Equation of State of a Low-Temperature Fermi Gas with Tunable Interactions. Science, 2010, 328, 729-732.	12.6	311
6	Collective Oscillations of an Imbalanced Fermi Gas: Axial Compression Modes and Polaron Effective Mass. Physical Review Letters, 2009, 103, 170402.	7.8	260
7	Emergence of coherence via transverse condensation in a uniform quasi-two-dimensional Bose gas. Nature Communications, 2015, 6, 6162.	12.8	206
8	Quench-Induced Supercurrents in an Annular Bose Gas. Physical Review Letters, 2014, 113, 135302.	7.8	172
9	Artificial gauge fields in materials and engineered systems. Comptes Rendus Physique, 2018, 19, 394-432.	0.9	143
10	Controlling Correlated Tunneling and Superexchange Interactions with ac-Driven Optical Lattices. Physical Review Letters, 2011, 107, 210405.	7.8	142
11	Fermi-Liquid Behavior of the Normal Phase of a Strongly Interacting Gas of Cold Atoms. Physical Review Letters, 2011, 106, 215303.	7.8	84
12	Experimental Realization of Plaquette Resonating Valence-Bond States with Ultracold Atoms in Optical Superlattices. Physical Review Letters, 2012, 108, 205301.	7.8	80
13	Sound Propagation in a Uniform Superfluid Two-Dimensional Bose Gas. Physical Review Letters, 2018, 121, 145301.	7.8	65
14	Probing chiral edge dynamics and bulk topology of a synthetic Hall system. Nature Physics, 2020, 16, 1017-1021.	16.7	59
15	Dynamic Optical Lattices of Subwavelength Spacing for Ultracold Atoms. Physical Review Letters, 2015, 115, 140401.	7.8	57
16	Experimental realization of strong effective magnetic fields in optical superlattice potentials. Applied Physics B: Lasers and Optics, 2013, 113, 1-11.	2.2	53
17	Transmission of near-resonant light through a dense slab of cold atoms. Physical Review A, 2017, 96, .	2.5	51
18	Quantum-enhanced sensing using non-classical spin states of a highly magnetic atom. Nature Communications, 2018, 9, 4955.	12.8	48

#	ARTICLE	IF	CITATIONS
19	Realizing one-dimensional topological superfluids with ultracold atomic gases. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 134005.	1.5	45
20	The equation of state of ultracold Bose and Fermi gases: a few examples. New Journal of Physics, 2010, 12, 103026.	2.9	43
21	Relaxation Dynamics in the Merging of N Independent Condensates. Physical Review Letters, 2017, 119, 190403.	7.8	41
22	Loading and compression of a single two-dimensional Bose gas in an optical accordion. Physical Review A, 2017, 95, .	2.5	39
23	Dynamical Symmetry and Breathers in a Two-Dimensional Bose Gas. Physical Review X, 2019, 9, .	8.9	37
24	Determination of Scale-Invariant Equations of State without Fitting Parameters: Application to the Two-Dimensional Bose Gas Across the Berezinskii-Kosterlitz-Thouless Transition. Physical Review Letters, 2014, 113, 020404.	7.8	31
25	Liquid Helium up to 160 bar. Journal of Low Temperature Physics, 2004, 136, 93-116.	1.4	29
26	Optical trapping of ultracold dysprosium atoms: transition probabilities, dynamic dipole polarizabilities and van der Waals C_6 coefficients. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 014005.	1.5	28
27	Optical cooling and trapping of highly magnetic atoms: the benefits of a spontaneous spin polarization. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 065005.	1.5	27
28	Enhanced Magnetic Sensitivity with Non-Gaussian Quantum Fluctuations. Physical Review Letters, 2019, 122, 173601.	7.8	27
29	Realization of a Townes Soliton in a Two-Component Planar Bose Gas. Physical Review Letters, 2021, 127, 023603.	7.8	26
30	Probing Quantum Criticality and Symmetry Breaking at the Microscopic Level. Physical Review Letters, 2019, 123, 120601.	7.8	19
31	Laughlin's Topological Charge Pump in an Atomic Hall Cylinder. Physical Review Letters, 2022, 128, 173202.	7.8	14
32	Resonant-light diffusion in a disordered atomic layer. Physical Review A, 2018, 97, .	2.5	12
33	Tan's two-body contact across the superfluid transition of a planar Bose gas. Nature Communications, 2021, 12, 760.	12.8	12
34	Anisotropic light shift and magic polarization of the intercombination line of dysprosium atoms in a far-detuned dipole trap. Physical Review A, 2018, 98, .	2.5	11
35	Optical control of the density and spin spatial profiles of a planar Bose gas. Journal of Physics B: Atomic, Molecular and Optical Physics, 2021, 54, 08LT01.	1.5	9
36	Bose-Hubbard physics in synthetic dimensions from interaction Trotterization. Physical Review Research, 2020, 2, .	3.6	8

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37	Condensation energy of a spin-1/2 strongly interacting Fermi gas. <i>Physical Review A</i> , 2013, 88, .	2.5	7
38	Magnetic Dipolar Interaction between Hyperfine Clock States in a Planar Alkali Bose Gas. <i>Physical Review Letters</i> , 2020, 125, 233604.	7.8	6
39	Creating fractional quantum Hall states with atomic clusters using light-assisted insertion of angular momentum. <i>Physical Review A</i> , 2016, 94, .	2.5	4
40	Simulating two-dimensional dynamics within a large-size atomic spin. <i>Physical Review A</i> , 2022, 105, .	2.5	3
41	Thermodynamics of the unitary Fermi gas. <i>Journal of Physics: Conference Series</i> , 2011, 264, 012012.	0.4	2
42	Partitioning dysprosium's electronic spin to reveal entanglement in nonclassical states. <i>Physical Review Research</i> , 2021, 3, .	3.6	2