Sylvain Nascimbene

List of Publications by Year
in descending order

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42 papers	5,688 citations	201674 27 h-index	265206 42 g-index
42 all docs	42 docs citations	42 times ranked	4363 citing authors

#	Article	IF	Citations
1	Simulating two-dimensional dynamics within a large-size atomic spin. Physical Review A, 2022, 105, .	2.5	3
2	Laughlinâ€™s Topological Charge Pump in an Atomic Hall Cylinder. Physical Review Letters, 2022, 128, 173202.	7.8	14
3	Tanâ€™s two-body contact across the superfluid transition of a planar Bose gas. Nature Communications, 2021, 12, 760.	12.8	12
4	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
5	Realization of a Townes Soliton in a Two-Component Planar Bose Gas. Physical Review Letters, 2021, 127, 023603.	7.8	26
6	Partitioning dysprosium's electronic spin to reveal entanglement in nonclassical states. Physical Review Research, 2021, 3, .	3.6	2
7	Magnetic Dipolar Interaction between Hyperfine Clock States in a Planar Alkali Bose Gas. Physical Review Letters, 2020, 125, 233604.	7.8	6
8	Probing chiral edge dynamics and bulk topology of a synthetic Hall system. Nature Physics, 2020, 16, 1017-1021.	16.7	59
9	Bose-Hubbard physics in synthetic dimensions from interaction Trotterization. Physical Review Research, 2020, 2, .	3.6	8
10	Probing Quantum Criticality and Symmetry Breaking at the Microscopic Level. Physical Review Letters, 2019, 123, 120601.	7.8	19
11	Dynamical Symmetry and Breathers in a Two-Dimensional Bose Gas. Physical Review X, 2019, 9, .	8.9	37
12	Enhanced Magnetic Sensitivity with Non-Gaussian Quantum Fluctuations. Physical Review Letters, 2019, 122, 173601.	7.8	27
13	Quantum-enhanced sensing using non-classical spin states of a highly magnetic atom. Nature Communications, 2018, 9, 4955.	12.8	48
14	Sound Propagation in a Uniform Superfluid Two-Dimensional Bose Gas. Physical Review Letters, 2018, 121, 145301.	7.8	65
15	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
16	Artificial gauge fields in materials and engineered systems. Comptes Rendus Physique, 2018, 19, 394-432.	0.9	143
17	Resonant-light diffusion in a disordered atomic layer. Physical Review A, 2018, 97, .	2.5	12
18	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

#	Article	IF	Citations
19	Loading and compression of a single two-dimensional Bose gas in an optical accordion. Physical Review A, 2017, 95, .	2.5	39
20	Optical trapping of ultracold dysprosium atoms: transition probabilities, dynamic dipole polarizabilities and van der WaalsC₆coefficients. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 014005.	1.5	28
21	Relaxation Dynamics in the Merging of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>N</mml:mi></mml:math> Independent Condensates. Physical Review Letters, 2017, 119, 190403.	7.8	41
22	Transmission of near-resonant light through a dense slab of cold atoms. Physical Review A, 2017, 96, .	2.5	51
23	Creating fractional quantum Hall states with atomic clusters using light-assisted insertion of angular momentum. Physical Review A, 2016, 94, .	2.5	4
24	Dynamic Optical Lattices of Subwavelength Spacing for Ultracold Atoms. Physical Review Letters, 2015, 115, 140401.	7.8	57
25	Emergence of coherence via transverse condensation in a uniform quasi-two-dimensional Bose gas. Nature Communications, 2015, 6, 6162.	12.8	206
26	Measuring the Chern number of Hofstadter bands with ultracold bosonic atoms. Nature Physics, 2015, 11, 162-166.	16.7	777
27	Quench-Induced Supercurrents in an Annular Bose Gas. Physical Review Letters, 2014, 113, 135302.	7.8	172
28	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
29	Condensation energy of a spin-1/2 strongly interacting Fermi gas. Physical Review A, 2013, 88, .	2.5	7
30	Experimental realization of strong effective magnetic fields in optical superlattice potentials. Applied Physics B: Lasers and Optics, 2013, 113, 1-11.	2.2	53
31	Realizing one-dimensional topological superfluids with ultracold atomic gases. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 134005.	1.5	45
32	Experimental Realization of Plaquette Resonating Valence-Bond States with Ultracold Atoms in Optical Superlattices. Physical Review Letters, 2012, 108, 205301.	7.8	80
33	Quantum simulations with ultracold quantum gases. Nature Physics, 2012, 8, 267-276.	16.7	1,612
34	Experimental Realization of Strong Effective Magnetic Fields in an Optical Lattice. Physical Review Letters, 2011, 107, 255301.	7.8	629
35	Thermodynamics of the unitary Fermi gas. Journal of Physics: Conference Series, 2011, 264, 012012.	0.4	2
36	Fermi-Liquid Behavior of the Normal Phase of a Strongly Interacting Gas of Cold Atoms. Physical Review Letters, 2011, 106, 215303.	7.8	84

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37	Controlling Correlated Tunneling and Superexchange Interactions with ac-Driven Optical Lattices. Physical Review Letters, 2011, 107, 210405.	7.8	142
38	Exploring the thermodynamics of a universal Fermi gas. Nature, 2010, 463, 1057-1060.	27.8	457
39	The equation of state of ultracold Bose and Fermi gases: a few examples. New Journal of Physics, 2010, 12, 103026.	2.9	43
40	The Equation of State of a Low-Temperature Fermi Gas with Tunable Interactions. Science, 2010, 328, 729-732.	12.6	311
41	Collective Oscillations of an Imbalanced Fermi Gas: Axial Compression Modes and Polaron Effective Mass. Physical Review Letters, 2009, 103, 170402.	7.8	260
42	Liquid Helium up to 160 bar. Journal of Low Temperature Physics, 2004, 136, 93-116.	1.4	29