

# Leonardo Fallani

## List of Publications by Year in descending order

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55  
papers

5,732  
citations

159525

30  
h-index

197736

49  
g-index

58  
all docs

58  
docs citations

58  
times ranked

3594  
citing authors

#	ARTICLE	IF	CITATIONS
1	Engineering entanglement Hamiltonians with strongly interacting cold atoms in optical traps. <i>Physical Review Research</i> , 2021, 3, .	1.3	5
2	Simulating lattice gauge theories within quantum technologies. <i>European Physical Journal D</i> , 2020, 74, 1.	0.6	272
3	Coherent Manipulation of Orbital Feshbach Molecules of Two-Electron Atoms. <i>Physical Review X</i> , 2019, 9, .	2.8	18
4	Geometrically protected triple-point crossings in an optical lattice. <i>Physical Review B</i> , 2018, 97, .	1.1	24
5	Majorana Quasiparticles Protected by Z2 Angular Momentum Conservation. <i>Physical Review Letters</i> , 2017, 118, 200404.	2.9	20
6	State-dependent interactions in ultracold <sup>174</sup> Yb probed by optical clock spectroscopy. <i>New Journal of Physics</i> , 2017, 19, 103037.	1.2	25
7	Realization of strongly interacting Fermi gases and spin-orbit coupled systems with an optical clock transition. , 2017, , .		0
8	Synthetic Dimensions and Spin-Orbit Coupling with an Optical Clock Transition. <i>Physical Review Letters</i> , 2016, 117, 220401.	2.9	212
9	Measuring absolute frequencies beyond the GPS limit via long-haul optical frequency dissemination. <i>Optics Express</i> , 2016, 24, 11865.	1.7	30
10	Strongly Interacting Gas of Two-Electron Fermions at an Orbital Feshbach Resonance. <i>Physical Review Letters</i> , 2015, 115, 265301.	2.9	117
11	A compact ultranarrow high-power laser system for experiments with 578 nm ytterbium clock transition. <i>Review of Scientific Instruments</i> , 2015, 86, 073111.	0.6	12
12	Dynamical structure factor of one-dimensional Bose gases: Experimental signatures of beyond-Luttinger-liquid physics. <i>Physical Review A</i> , 2015, 91, .	1.0	83
13	Cold atoms: A field enabled by light. <i>Europhysics Letters</i> , 2015, 110, 53001.	0.7	12
14	Observation of chiral edge states with neutral fermions in synthetic Hall ribbons. <i>Science</i> , 2015, 349, 1510-1513.	6.0	551
15	Direct Observation of Coherent Interorbital Spin-Exchange Dynamics. <i>Physical Review Letters</i> , 2014, 113, 120402.	2.9	141
16	A one-dimensional liquid of fermions with tunable spin. <i>Nature Physics</i> , 2014, 10, 198-201.	6.5	323
17	Spatial entanglement of bosons in optical lattices. <i>Nature Communications</i> , 2013, 4, 2161.	5.8	64
18	Fast closed-loop optimal control of ultracold atoms in an optical lattice. <i>Physical Review A</i> , 2013, 88, .	1.0	51

#	ARTICLE	IF	CITATIONS
19	An intracavity frequency doubled H <sub>2</sub> Raman laser scheme for generating narrow-linewidth yellow radiation. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2012, 29, 1065.	0.9	0
20	Quasiparticle Dynamics in a Bose Insulator Probed by Interband Bragg Spectroscopy. <i>Physical Review Letters</i> , 2012, 109, 055301.	2.9	27
21	Inelastic light scattering to probe strongly correlated bosons in optical lattices. <i>Journal of Physics: Conference Series</i> , 2011, 264, 012018.	0.3	2
22	Momentum-resolved study of an array of one-dimensional strongly phase-fluctuating Bose gases. <i>Physical Review A</i> , 2011, 83, .	1.0	47
23	Bragg Spectroscopy of Strongly Correlated Bosons in Optical Lattices. <i>Journal of Low Temperature Physics</i> , 2010, 158, 5-15.	0.6	22
24	An ideal Bose-Einstein condensate: From Anderson localization to precision measurements. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2010, 42, 425-431.	1.3	0
25	BRAGG SPECTROSCOPY OF ULTRACOLD BOSE GASES IN OPTICAL LATTICES. , 2010, , .		0
26	Coherent addition of laser beams in resonant passive optical cavities. <i>Optics Letters</i> , 2010, 35, 3105.	1.7	4
27	Excitations of Bose-Einstein condensates in a one-dimensional periodic potential. <i>Physical Review A</i> , 2009, 79, .	1.0	32
28	Exploring Correlated 1D Bose Gases from the Superfluid to the Mott-Insulator State by Inelastic Light Scattering. <i>Physical Review Letters</i> , 2009, 102, 155301.	2.9	123
29	Multi-band spectroscopy of inhomogeneous Mott-insulator states of ultracold bosons. <i>New Journal of Physics</i> , 2009, 11, 103030.	1.2	23
30	Anderson localization of a non-interacting Bose-Einstein condensate. <i>Nature</i> , 2008, 453, 895-898.	13.7	1,393
31	Controlling Cold-Atom Conductivity. <i>Science</i> , 2008, 322, 1480-1481.	6.0	2
32	Bose-Einstein Condensates in Disordered Potentials. <i>Advances in Atomic, Molecular and Optical Physics</i> , 2008, , 119-160.	2.3	70
33	Noise Correlation Spectroscopy of the Broken Order of a Mott Insulating Phase. <i>Physical Review Letters</i> , 2008, 100, 250403.	2.9	36
34	Inhomogeneous broadening of a Mott insulator spectrum. <i>New Journal of Physics</i> , 2007, 9, 107-107.	1.2	36
35	Ultracold Atoms in a Disordered Crystal of Light: Towards a Bose Glass. <i>Physical Review Letters</i> , 2007, 98, 130404.	2.9	384
36	Effect of interactions on the localization of a Bose-Einstein condensate in a quasiperiodic lattice. <i>Physical Review A</i> , 2007, 75, .	1.0	68

#	ARTICLE	IF	CITATIONS
37	Insulating phases of ultracold bosons in a disordered optical lattice: from a Mott Insulator to a Bose Class. AIP Conference Proceedings, 2006, , .	0.3	1
38	United through repulsion. Nature, 2006, 441, 820-821.	13.7	5
39	From superradiant Rayleigh scattering to Bragg scattering. European Physical Journal D, 2005, 32, 167-170.	0.6	9
40	Bose-Einstein Condensate in a Random Potential. Physical Review Letters, 2005, 95, 070401.	2.9	341
41	Collective atomic recoil in a moving Bose-Einstein condensate: From superradiance to Bragg scattering. Physical Review A, 2005, 71, .	1.0	70
42	Unstable regimes for a Bose-Einstein condensate in an optical lattice. Physical Review A, 2005, 72, .	1.0	87
43	Effect of Optical Disorder and Single Defects on the Expansion of a Bose-Einstein Condensate in a One-Dimensional Waveguide. Physical Review Letters, 2005, 95, 170410.	2.9	239
44	Present status of the fine-structure frequencies of the 23P helium level. Canadian Journal of Physics, 2005, 83, 301-310.	0.4	46
45	Bose-Einstein condensate in an optical lattice with tunable spacing: transport and static properties. Optics Express, 2005, 13, 4303.	1.7	44
46	Observation of Dynamical Instability for a Bose-Einstein Condensate in a Moving 1D Optical Lattice. Physical Review Letters, 2004, 93, 140406.	2.9	280
47	Superradiant light scattering from a moving Bose-Einstein condensate. Optics Communications, 2004, 233, 155-160.	1.0	54
48	Decoherence effects in superradiant light scattering from a moving bose-einstein condensate. Journal of Modern Optics, 2004, 51, 785-797.	0.6	1
49	QUANTUM DEGENERATE BOSONS AND FERMIONS IN A 1D OPTICAL LATTICE. , 2004, , .		0
50	GENERATION AND PROPAGATION OF COHERENT MATTER WAVES. , 2004, , .		0
51	Bose-Einstein Condensates in an Optical Lattice. , 2004, , 209-222.		0
52	Collective Excitations of a Trapped Bose-Einstein Condensate in the Presence of a 1D Optical Lattice. Physical Review Letters, 2003, 90, 140405.	2.9	51
53	Optically Induced Lensing Effect on a Bose-Einstein Condensate Expanding in a Moving Lattice. Physical Review Letters, 2003, 91, 240405.	2.9	66
54	Superfluid current disruption in a chain of weakly coupled Bose-Einstein condensates. New Journal of Physics, 2003, 5, 71-71.	1.2	179

#	ARTICLE	IF	CITATIONS
55	Dynamics of a trapped Bose-Einstein condensate in the presence of a one-dimensional optical lattice. Journal of Optics B: Quantum and Semiclassical Optics, 2003, 5, S17-S22.	1.4	12