

Francesca Ferlaino

List of Publications by Year in descending order

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79
papers

7,018
citations

71102

41
h-index

74163

75
g-index

80
all docs

80
docs citations

80
times ranked

2833
citing authors

#	ARTICLE	IF	CITATIONS
1	Bose-Einstein Condensation of Erbium. <i>Physical Review Letters</i> , 2012, 108, 210401.	7.8	660
2	Ultracold Dense Samples of Dipolar RbCs Molecules in the Rovibrational and Hyperfine Ground State. <i>Physical Review Letters</i> , 2014, 113, 205301.	7.8	419
3	Quantum-Fluctuation-Driven Crossover from a Dilute Bose-Einstein Condensate to a Macrodroplet in a Dipolar Quantum Fluid. <i>Physical Review X</i> , 2016, 6, .	8.9	315
4	Collapse of a Degenerate Fermi Gas. <i>Science</i> , 2002, 297, 2240-2243.	12.6	307
5	Extended Bose-Hubbard models with ultracold magnetic atoms. <i>Science</i> , 2016, 352, 201-205.	12.6	249
6	Long-Lived and Transient Supersolid Behaviors in Dipolar Quantum Gases. <i>Physical Review X</i> , 2019, 9, .	8.9	231
7	Observation of an Efimov-like trimer resonance in ultracold atom-dimer scattering. <i>Nature Physics</i> , 2009, 5, 227-230.	16.7	213
8	Quantum chaos in ultracold collisions of gas-phase erbium atoms. <i>Nature</i> , 2014, 507, 475-479.	27.8	196
9	Observation of roton mode population in a dipolar quantum gas. <i>Nature Physics</i> , 2018, 14, 442-446.	16.7	193
10	Atom Interferometry with Trapped Fermi Gases. <i>Physical Review Letters</i> , 2004, 92, 230402.	7.8	182
11	Evidence for Universal Four-Body States Tied to an Efimov Trimer. <i>Physical Review Letters</i> , 2009, 102, 140401.	7.8	182
12	Universality of the Three-Body Parameter for Efimov States in Ultracold Cesium. <i>Physical Review Letters</i> , 2011, 107, 120401.	7.8	180
13	Superfluid current disruption in a chain of weakly coupled Bose-Einstein condensates. <i>New Journal of Physics</i> , 2003, 5, 71-71.	2.9	179
14	Reaching Fermi Degeneracy via Universal Dipolar Scattering. <i>Physical Review Letters</i> , 2014, 112, 010404.	7.8	167
15	Excitation Spectrum of a Trapped Dipolar Supersolid and Its Experimental Evidence. <i>Physical Review Letters</i> , 2019, 123, 050402.	7.8	142
16	Production of a Fermi gas of atoms in an optical lattice. <i>Physical Review A</i> , 2003, 68, .	2.5	139
17	Feshbach spectroscopy of $aK\hat{\sim}Rb$ atomic mixture. <i>Physical Review A</i> , 2006, 73, .	2.5	139
18	Towards the production of ultracold ground-state RbCs molecules: Feshbach resonances, weakly bound states, and the coupled-channel model. <i>Physical Review A</i> , 2012, 85, .	2.5	131

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19	Collisionally Induced Transport in Periodic Potentials. <i>Physical Review Letters</i> , 2004, 92, 160601.	7.8	121
20	Forty years of Efimov physics: How a bizarre prediction turned into a hot topic. <i>Physics Magazine</i> , 0, 3, .	0.1	118
21	Efimov Resonances in Ultracold Quantum Gases. <i>Few-Body Systems</i> , 2011, 51, 113-133.	1.5	118
22	Magnetic Control of the Interaction in Ultracold K-Rb Mixtures. <i>Physical Review Letters</i> , 2003, 90, 163202.	7.8	114
23	Control of the interaction in a Fermi-Bose mixture. <i>Physical Review A</i> , 2006, 74, .	2.5	101
24	Observation of interspecies Feshbach resonances in an ultracold Rb-Cs mixture. <i>Physical Review A</i> , 2009, 79, .	2.5	101
25	Production of a dual-species Bose-Einstein condensate of Rb and Cs atoms. <i>European Physical Journal D</i> , 2011, 65, 3-9.	1.3	96
26	Two-dimensional supersolidity in a dipolar quantum gas. <i>Nature</i> , 2021, 596, 357-361.	27.8	91
27	Feshbach resonances, weakly bound molecular states, and coupled-channel potentials for cesium at high magnetic fields. <i>Physical Review A</i> , 2013, 87, .	2.5	88
28	Observation of Fermi surface deformation in a dipolar quantum gas. <i>Science</i> , 2014, 345, 1484-1487.	12.6	85
29	Probing the Roton Excitation Spectrum of a Stable Dipolar Bose Gas. <i>Physical Review Letters</i> , 2019, 122, 183401.	7.8	85
30	Dipolar Quantum Mixtures of Erbium and Dysprosium Atoms. <i>Physical Review Letters</i> , 2018, 121, 213601.	7.8	84
31	Determination of atomic scattering lengths from measurements of molecular binding energies near Feshbach resonances. <i>Physical Review A</i> , 2009, 79, .	2.5	81
32	Emergence of Chaotic Scattering in Ultracold Er and Dy. <i>Physical Review X</i> , 2015, 5, .	8.9	81
33	Insulating Behavior of a Trapped Ideal Fermi Gas. <i>Physical Review Letters</i> , 2004, 93, 120401.	7.8	80
34	Magnetically Controlled Exchange Process in an Ultracold Atom-Dimer Mixture. <i>Physical Review Letters</i> , 2010, 104, 053201.	7.8	77
35	Narrow-line magneto-optical trap for erbium. <i>Physical Review A</i> , 2012, 85, .	2.5	77
36	Ultracold Dipolar Molecules Composed of Strongly Magnetic Atoms. <i>Physical Review Letters</i> , 2015, 115, 203201.	7.8	76

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37	Mean-field analysis of the stability of a K-Rb Fermi-Bose mixture. <i>Physical Review A</i> , 2003, 68, .	2.5	71
38	Molecular spectroscopy for ground-state transfer of ultracold RbCs molecules. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 18926.	2.8	68
39	Spectroscopy of ultracold trapped cesium Feshbach molecules. <i>Physical Review A</i> , 2007, 76, .	2.5	67
40	Collective Excitations of a Trapped Bose-Einstein Condensate in the Presence of a 1D Optical Lattice. <i>Physical Review Letters</i> , 2003, 90, 140405.	7.8	51
41	Collisions between Tunable Halo Dimers: Exploring an Elementary Four-Body Process with Identical Bosons. <i>Physical Review Letters</i> , 2008, 101, 023201.	7.8	51
42	Realization of a Strongly Interacting Fermi Gas of Dipolar Atoms. <i>Physical Review Letters</i> , 2018, 121, 093602.	7.8	43
43	Birth, Life, and Death of a Dipolar Supersolid. <i>Physical Review Letters</i> , 2021, 126, 233401.	7.8	43
44	Supersolidity in an elongated dipolar condensate. <i>Physical Review Research</i> , 2020, 2, .	3.6	42
45	Dipolar oscillations in a quantum degenerate Fermi-Bose atomic mixture. <i>Journal of Optics B: Quantum and Semiclassical Optics</i> , 2003, 5, S3-S8.	1.4	41
46	Controlling dipolar exchange interactions in a dense three-dimensional array of large-spin fermions. <i>Physical Review Research</i> , 2020, 2, .	3.6	39
47	Two-Dimensional Supersolid Formation in Dipolar Condensates. <i>Physical Review Letters</i> , 2022, 128, .	7.8	39
48	Radio Frequency Selective Addressing of Localized Atoms in a Periodic Potential. <i>Physical Review Letters</i> , 2004, 93, 120407.	7.8	36
49	Dynamics of a Bose-Einstein condensate at finite temperature in an atom-optical coherence filter. <i>Physical Review A</i> , 2002, 66, .	2.5	35
50	Resonant five-body recombination in an ultracold gas of bosonic atoms. <i>New Journal of Physics</i> , 2013, 15, 043040.	2.9	35
51	Phase coherence in out-of-equilibrium supersolid states of ultracold dipolar atoms. <i>Nature Physics</i> , 2021, 17, 356-361.	16.7	32
52	Developments in atomic control using ultracold magnetic lanthanides. <i>Nature Physics</i> , 2021, 17, 1349-1357.	16.7	32
53	Two-species five-beam magneto-optical trap for erbium and dysprosium. <i>Physical Review A</i> , 2018, 97, .	2.5	31
54	Resonant atom-dimer collisions in cesium: Testing universality at positive scattering lengths. <i>Physical Review A</i> , 2014, 90, .	2.5	30

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55	Anisotropic Relaxation Dynamics in a Dipolar Fermi Gas Driven Out of Equilibrium. <i>Physical Review Letters</i> , 2014, 113, 263201.	7.8	29
56	Anisotropic polarizability of erbium atoms. <i>Physical Review A</i> , 2018, 97, .	2.5	29
57	Feshbach resonances in an erbium-dysprosium dipolar mixture. <i>Physical Review A</i> , 2020, 102, .	2.5	28
58	Hyperfine structure of laser-cooling transitions in fermionic erbium-167. <i>Physical Review A</i> , 2013, 88, .	2.5	27
59	Maintaining supersolidity in one and two dimensions. <i>Physical Review A</i> , 2021, 104, .	2.5	26
60	Metastable Feshbach Molecules in High Rotational States. <i>Physical Review Letters</i> , 2008, 100, 083002.	7.8	22
61	Bragg scattering of an ultracold dipolar gas across the phase transition from Bose-Einstein condensate to supersolid in the free-particle regime. <i>Physical Review A</i> , 2021, 104, .	2.5	21
62	Expansion of a Fermi Gas Interacting with a Bose-Einstein Condensate. <i>Physical Review Letters</i> , 2004, 92, 140405.	7.8	19
63	Interspecies interactions in an ultracold dipolar mixture. <i>Physical Review A</i> , 2022, 105, .	2.5	15
64	Determination of the scattering length of erbium atoms. <i>Physical Review A</i> , 2022, 105, .	2.5	13
65	Dynamics of a trapped Bose-Einstein condensate in the presence of a one-dimensional optical lattice. <i>Journal of Optics B: Quantum and Semiclassical Optics</i> , 2003, 5, S17-S22.	1.4	12
66	Collisions of ultracold trapped cesium Feshbach molecules. <i>Laser Physics</i> , 2010, 20, 23-31.	1.2	11
67	Deep learning-assisted classification of site-resolved quantum gas microscope images. <i>Measurement Science and Technology</i> , 2020, 31, 025201.	2.6	10
68	Atom interferometry in a vertical optical lattice. <i>Fortschritte Der Physik</i> , 2004, 52, 1173-1179.	4.4	8
69	Observation of a narrow inner-shell orbital transition in atomic erbium at 1299Ånm. <i>Physical Review Research</i> , 2021, 3, .	3.6	8
70	Revealing the topological nature of the bond order wave in a strongly correlated quantum system. <i>Physical Review Research</i> , 2022, 4, .	3.6	8
71	Ground state of an ultracold Fermi gas of tilted dipoles in elongated traps. <i>New Journal of Physics</i> , 2018, 20, 093016.	2.9	6
72	Spectroscopy of Rydberg states in erbium using electromagnetically induced transparency. <i>Physical Review Research</i> , 2021, 3, .	3.6	6

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73	Observation of an Efimov resonance in an ultracold mixture of atoms and weakly bound dimers. Journal of Physics: Conference Series, 2009, 194, 012064.	0.4	4
74	Complexity trapped by simplicity. Nature, 2014, 512, 261-262.	27.8	3
75	Quasi-2D Bose-Fermi mixtures in an optical lattice. European Physical Journal Special Topics, 2004, 116, 253-258.	0.2	3
76	QUANTUM DEGENERATE BOSONS AND FERMIONS IN A 1D OPTICAL LATTICE. , 2004, , .		0
77	Dipolar quantum matter near absolute zero temperature. , 2017, , .		0
78	Tuning the interactions in an atomic Fermi-Bose mixture. , 2006, , .		0
79	Ultracold Feshbach Molecules. , 2009, , .		0