

D Blume

List of Publications by Year in descending order

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42
papers

1,624
citations

430442

18
h-index

276539

41
g-index

43
all docs

43
docs citations

43
times ranked

988
citing authors

#	ARTICLE	IF	CITATIONS
1	Theory and application of explicitly correlated Gaussians. <i>Reviews of Modern Physics</i> , 2013, 85, 693-749.	16.4	263
2	Observation of the Efimov state of the helium trimer. <i>Science</i> , 2015, 348, 551-555.	6.0	190
3	Few-body physics with ultracold atomic and molecular systems in traps. <i>Reports on Progress in Physics</i> , 2012, 75, 046401.	8.1	160
4	Tuning the Interactions of Spin-Polarized Fermions Using Quasi-One-Dimensional Confinement. <i>Physical Review Letters</i> , 2004, 92, 133202.	2.9	123
5	Universal Properties of a Trapped Two-Component Fermi Gas at Unitarity. <i>Physical Review Letters</i> , 2007, 99, 233201.	2.9	95
6	Monte Carlo hyperspherical description of helium cluster excited states. <i>Journal of Chemical Physics</i> , 2000, 112, 8053-8067.	1.2	94
7	Comparative study of He ₃ , Ne ₃ , and Ar ₃ using hyperspherical coordinates. <i>Journal of Chemical Physics</i> , 2000, 113, 2145-2158.	1.2	69
8	Dipolar Bose-Einstein condensates with dipole-dependent scattering length. <i>Physical Review A</i> , 2006, 74, .	1.0	68
9	BEC-BCS crossover of a trapped two-component Fermi gas with unequal masses. <i>Physical Review A</i> , 2007, 76, .	1.0	56
10	Nondivergent pseudopotential treatment of spin-polarized fermions under one- and three-dimensional harmonic confinement. <i>Physical Review A</i> , 2004, 70, .	1.0	52
11	Generalized Efimov Scenario for Heavy-Light Mixtures. <i>Physical Review Letters</i> , 2014, 113, 213201.	2.9	40
12	Breakdown of Universality for Unequal-Mass Fermi Gases with Infinite Scattering Length. <i>Physical Review Letters</i> , 2010, 105, 170403.	2.9	38
13	Pseudopotential treatment of two aligned dipoles under external harmonic confinement. <i>Physical Review A</i> , 2007, 75, .	1.0	34
14	Three s -wave-interacting fermions under anisotropic harmonic confinement: Dimensional crossover of energetics and virial coefficients. <i>Physical Review A</i> , 2012, 86, .	1.0	34
15	Universal Four-Body States in Heavy-Light Mixtures with a Positive Scattering Length. <i>Physical Review Letters</i> , 2012, 109, 230404.	2.9	31
16	Path-Integral Monte-Carlo Determination of the Fourth-Order Virial Coefficient for a Unitary Two-Component Fermi Gas with Zero-Range Interactions. <i>Physical Review Letters</i> , 2016, 116, 230401.	2.9	26
17	Energy and structural properties of N -boson clusters attached to three-body Efimov states: Two-body zero-range interactions and the role of the three-body regulator. <i>Physical Review A</i> , 2015, 92, .	1.0	22
18	Density Oscillations Induced by Individual Ultracold Two-Body Collisions. <i>Physical Review Letters</i> , 2019, 122, 083401.	2.9	19

#	ARTICLE	IF	CITATIONS
19	Efimov Physics and the Three-Body Parameter for Shallow van der Waals Potentials. <i>Few-Body Systems</i> , 2015, 56, 859-867.	0.7	18
20	Harmonically trapped Fermi gas: Temperature dependence of the Tan contact. <i>Physical Review A</i> , 2013, 88, .	1.0	17
21	Harmonically trapped two-atom systems: Interplay of short-ranges-wave interaction and spin-orbit coupling. <i>Physical Review A</i> , 2014, 89, .	1.0	15
22	Vibrationally excited states and fragmentation geometries of NeN and ArN clusters, $N=3\hat{a}^{\epsilon}6$, using hyperspherical coordinates. <i>Journal of Chemical Physics</i> , 2000, 113, 4242-4249.	1.2	14
23	Stability of inhomogeneous multicomponent Fermi gases. <i>Physical Review A</i> , 2008, 77, .	1.0	13
24	Hyperspherical explicitly correlated Gaussian approach for few-body systems with finite angular momentum. <i>Physical Review A</i> , 2012, 86, .	1.0	12
25	Analytical coupled-channel treatment of two-body scattering in the presence of three-dimensional isotropic spin-orbit coupling. <i>Physical Review A</i> , 2017, 95, .	1.0	11
26	Harmonically trapped four-boson system. <i>Physical Review A</i> , 2018, 97, .	1.0	10
27	Observation of resonant scattering between ultracold heteronuclear Feshbach molecules. <i>Physical Review A</i> , 2019, 100, .	1.0	10
28	Spinor Bose-Einstein condensate interferometer within the undepleted pump approximation: Role of the initial state. <i>Physical Review A</i> , 2019, 100, .	1.0	10
29	Nonexponential Tunneling due to Mean-Field-Induced Swallowtails. <i>Physical Review Letters</i> , 2020, 125, 213401.	2.9	10
30	Universal and nonuniversal effectiveN-body interactions for ultracold harmonically trapped few-atom systems. <i>Physical Review A</i> , 2014, 90, .	1.0	9
31	Abnormal Superfluid Fraction of Harmonically Trapped Few-Fermion Systems. <i>Physical Review Letters</i> , 2014, 112, 235301.	2.9	9
32	Mean-field spin-oscillation dynamics beyond the single-mode approximation for a harmonically trapped spin-1 Bose-Einstein condensate. <i>Physical Review A</i> , 2020, 102, .	1.0	9
33	Small two-component Fermi gases in a cubic box with periodic boundary conditions. <i>Physical Review A</i> , 2013, 87, .	1.0	8
34	Rabi oscillations and Ramsey-type pulses in ultracold bosons: Role of interactions. <i>Physical Review A</i> , 2020, 101, .	1.0	6
35	Hyperspherical lowest-order constrained-variational approximation to resonant Bose-Einstein condensates. <i>Physical Review A</i> , 2018, 97, .	1.0	5
36	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mi} \rangle K \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -matrix formulation of two-particle scattering in a waveguide in the presence of one-dimensional spin-orbit coupling. <i>Physical Review A</i> , 2018, 98, .	1.0	4

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37	Three-Boson Spectrum in the Presence of 1D Spin-Orbit Coupling: Efimov's Generalized Radial Scaling Law. <i>Physical Review X</i> , 2018, 8, .	2.8	4
38	Two emitters coupled to a bath with Kerr-like nonlinearity: Exponential decay, fractional populations, and Rabi oscillations. <i>Physical Review A</i> , 2022, 105, .	1.0	4
39	Equation of state of cold atoms: A lowest-order-constrained variational study of systems with large non- s -wave scattering lengths. <i>Structural properties of ^4He and ^3He</i>	1.0	2
40	Structural properties of ^4He and ^3He . <i>Physical Review A</i> , 2007, 76, 033607.	1.0	2
41	Lowest breathing mode of bosonic helium clusters. <i>European Physical Journal D</i> , 2002, 18, 83-86.	0.6	1
42	Tunable high-temperature thermodynamics of weakly interacting dipolar gases. <i>Physical Review A</i> , 2014, 89, .	1.0	1