

Uwe R Fischer

List of Publications by Year in descending order

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27
papers

955
citations

516710

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526287

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27
docs citations

27
times ranked

667
citing authors

#	ARTICLE	IF	CITATIONS
1	Vortex States of Rapidly Rotating Dilute Bose-Einstein Condensates. <i>Physical Review Letters</i> , 2003, 90, 140402.	7.8	160
2	Gibbons-Hawking Effect in the Sonic deSitter Space-Time of an Expanding Bose-Einstein-Condensed Gas. <i>Physical Review Letters</i> , 2003, 91, 240407.	7.8	154
3	Quantum simulation of cosmic inflation in two-component Bose-Einstein condensates. <i>Physical Review A</i> , 2004, 70, .	2.5	109
4	“Cosmological” quasiparticle production in harmonically trapped superfluid gases. <i>Physical Review A</i> , 2004, 69, .	2.5	101
5	Riemannian Geometry of Irrotational Vortex Acoustics. <i>Physical Review Letters</i> , 2002, 88, 110201.	7.8	52
6	Condensate fragmentation as a sensitive measure of the quantum many-body behavior of bosons with long-range interactions. <i>Physical Review A</i> , 2015, 91, .	2.5	51
7	Probing the Scale Invariance of the Inflationary Power Spectrum in Expanding Quasi-Two-Dimensional Dipolar Condensates. <i>Physical Review Letters</i> , 2017, 118, 130404.	7.8	39
8	Interacting trapped bosons yield fragmented condensate states in low dimensions. <i>Physical Review A</i> , 2010, 82, .	2.5	32
9	Revealing Single-Trap Condensate Fragmentation by Measuring Density-Density Correlations after Time of Flight. <i>Physical Review Letters</i> , 2014, 113, 140404.	7.8	30
10	On the space-time curvature experienced by quasiparticle excitations in the Painlevé-Gullstrand effective geometry. <i>Annals of Physics</i> , 2003, 304, 22-39.	2.8	28
11	Ultrafast Quantum Random Access Memory Utilizing Single Rydberg Atoms in a Bose-Einstein Condensate. <i>Physical Review Letters</i> , 2013, 111, 240504.	7.8	27
12	Existence of Long-Range Order for Trapped Interacting Bosons. <i>Physical Review Letters</i> , 2002, 89, 280402.	7.8	23
13	“Photonic” Cat States from Strongly Interacting Matter Waves. <i>Physical Review Letters</i> , 2015, 115, 260404.	7.8	22
14	Implementation-independent sufficient condition of the Knill-Laflamme type for the autonomous protection of logical qudits by strong engineered dissipation. <i>Physical Review A</i> , 2018, 98, .	2.5	22
15	Quantum backreaction in dilute Bose-Einstein condensates. <i>Physical Review D</i> , 2005, 72, .	4.7	19
16	Roton entanglement in quenched dipolar Bose-Einstein condensates. <i>Physical Review A</i> , 2018, 97, .	2.5	19
17	Truncated many-body dynamics of interacting bosons: A variational principle with error monitoring. <i>International Journal of Modern Physics B</i> , 2014, 28, 1550021.	2.0	16
18	Testing the upper bound on the speed of scrambling with an analogue of Hawking radiation using trapped ions. <i>European Physical Journal C</i> , 2022, 82, 1.	3.9	13

#	ARTICLE	IF	CITATIONS
19	Self-consistent determination of the many-body state of ultracold bosonic atoms in a one-dimensional harmonic trap. <i>Annals of Physics</i> , 2019, 405, 274-288.	2.8	10
20	Maximal length of trapped one-dimensional Bose-Einstein condensates. <i>Journal of Low Temperature Physics</i> , 2005, 138, 723-728.	1.4	7
21	Stability of spherically trapped three-dimensional Bose-Einstein condensates against macroscopic fragmentation. <i>Physical Review A</i> , 2013, 87, .	2.5	4
22	Existence of steady-state black hole analogs in finite quasi-one-dimensional Bose-Einstein condensates. <i>Physical Review D</i> , 2022, 105, .	4.7	4
23	Benchmarking the multiconfigurational Hartree method by the exact wavefunction of two harmonically trapped bosons with contact interaction. <i>Annals of Physics</i> , 2021, 434, 168592.	2.8	3
24	Inherent nonlinearity of fluid motion and acoustic gravitational wave memory. <i>Physical Review D</i> , 2022, 105, .	4.7	3
25	Analogue gravitational field from nonlinear fluid dynamics. <i>Classical and Quantum Gravity</i> , 2022, 39, 075018.	4.0	3
26	Exact surface-wave spectrum of a dilute quantum liquid. <i>Physical Review B</i> , 2019, 99, .	3.2	2
27	Stoner-Wohlfarth switching of the condensate magnetization in a dipolar spinor gas and the metrology of excitation damping. <i>Physical Review A</i> , 2020, 102, .	2.5	2