Kenichi Kasamatsu

List of Publications by Year
in descending order

58	2,226	279798	214800
papers	citations	23 h-index	47 g-index

59	59	59	994
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Vortex lattice formation in a rotating Bose-Einstein condensate. Physical Review A, 2002, 65, .	2.5	272
2	VORTICES IN MULTICOMPONENT BOSEâ€“EINSTEIN CONDENSATES. International Journal of Modern Physics B, 2005, 19, 1835-1904.	2.0	217
3	Vortex Phase Diagram in Rotating Two-Component Bose-Einstein Condensates. Physical Review Letters, 2003, 91, 150406.	7.8	183
4	Giant hole and circular superflow in a fast rotating Bose-Einstein condensate. Physical Review A, 2002, 66, .	2.5	138
5	Vortex Molecules in Coherently Coupled Two-Component Bose-Einstein Condensates. Physical Review Letters, 2004, 93, 250406.	7.8	125
6	Multiple Domain Formation Induced by Modulation Instability in Two-Component Bose-Einstein Condensates. Physical Review Letters, 2004, 93, 100402.	7.8	119
7	Spin textures in rotating two-component Bose-Einstein condensates. Physical Review A, 2005, 71, .	2.5	108
8	Modulation instability and solitary-wave formation in two-component Bose-Einstein condensates. Physical Review A, 2006, 74, .	2.5	95
9	Interaction of half-quantized vortices in two-component Bose-Einstein condensates. Physical Review A, 2011, 83, .	2.5	93
10	Quantum Kelvin-Helmholtz instability in phase-separated two-component Bose-Einstein condensates. Physical Review B, 2010, 81, .	3.2	87
11	Vortex sheet in rotating two-component Bose-Einstein condensates. Physical Review A, 2009, 79, .	2.5	72
12	Crossover between Kelvin-Helmholtz and counter-superflow instabilities in two-component Bose-Einstein condensates. Physical Review A, 2010, 82, .	2.5	54
13	Quantum simulation of (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq1 1 0.784314 rgBT /Overlock 10	4.7	52
14	Modulational Instability, Inter-Component Asymmetry, and Formation of Quantum Droplets in One-Dimensional Binary Bose Gases. Symmetry, 2020, 12, 174.	2.2	52
15	Creating vortons and three-dimensional skyrmions from domain-wall annihilation with stretched vortices in Bose-Einstein condensates. Physical Review A, 2012, 85, .	2.5	45
16	Short-range intervortex interaction and interacting dynamics of half-quantized vortices in two-component Bose-Einstein condensates. Physical Review A, 2016, 93, .	2.5	44
17	Atomic Quantum Simulation of the Lattice Gauge-Higgs Model: Higgs Couplings and Emergence of Exact Local Gauge Symmetry. Physical Review Letters, 2013, 111, 115303.	7.8	43
18	Dynamical Vortex Phases in a Bose-Einstein Condensate Driven by a Rotating Optical Lattice. Physical Review Letters, 2006, 97, 240404.	7.8	40

#	Article	IF	Citations
19	Three-dimensional dynamics of vortex-lattice formation in Bose-Einstein condensates. Physical Review A, 2005, 71, .	2.5	37
20	Wall-vortex composite solitons in two-component Bose-Einstein condensates. Physical Review A, 2013, 88, .	2.5	36
21	Analogues of D-branes in Bose-Einstein condensates. Journal of High Energy Physics, 2010, 2010, 1.	4.7	30
22	Tachyon Condensation Due to Domain-Wall Annihilation in Bose-Einstein Condensates. Physical Review Letters, 2012, 109, 245301.	7.8	30
23	Nambu-Goldstone modes in segregated Bose-Einstein condensates. Physical Review A, 2013, 88, .	2.5	25
24	Modulation instability associated nonlinear dynamics of spinâ€“orbit coupled Boseâ€“Einstein condensates. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 045301.	1.5	21
25	Quadrupole and scissors modes and nonlinear mode coupling in trapped two-component Bose-Einstein condensates. Physical Review A, 2004, 69, .	2.5	20
26	D-brane solitons and boojums in field theory and Boseâ€“Einstein condensates. Journal of Physics Condensed Matter, 2013, 25, 404213.	1.8	15
27	Transverse instability and disintegration of a domain wall of a relative phase in coherently coupled two-component Bose-Einstein condensates. Physical Review A, 2019, 100, .	2.5	15
28	Dynamics of quantized vortices in Bose-Einstein condensates with laser-induced spin-orbit coupling. Physical Review A, 2015, 92, .	2.5	14
29	Atomic quantum simulation of a three-dimensional U(1) gauge-Higgs model. Physical Review A, 2016, 94, .	2.5	14
30	Spontaneous radiation and amplification of Kelvin waves on quantized vortices in Bose-Einstein condensates. Physical Review A, 2009, 79, .	2.5	12
31	Vortex Formations from Domain Wall Annihilations inÂTwo-Component Bose-Einstein Condensates. Journal of Low Temperature Physics, 2011, 162, 243-249.	1.4	12
32	Decay of two-dimensional quantum turbulence in binary Bose-Einstein condensates. Physical Review A, 2021, 103, .	2.5	11
33	Is a Doubly Quantized Vortex Dynamically Unstable in Uniform Superfluids?. Journal of the Physical Society of Japan, 2018, 87, 023601.	1.6	10
34	Tachyon Condensation and Brane Annihilation in Bose-Einstein Condensates: Spontaneous Symmetry Breaking in Restricted Lower-Dimensional Subspace. Journal of Low Temperature Physics, 2013, 171, 443-454.	1.4	9
35	Pattern formation of quantum Kelvin-Helmholtz instability in binary superfluids. Physical Review A, 2021, 104, .	2.5	8
36	Vortex Generation in Cyclically Coupled Superfluids and the Kibble-Zurek Mechanism. Journal of Low Temperature Physics, 2002, 126, 315-320.	1.4	7

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37	Static and Dynamic Properties of Multicomponent Boseâ€“Einstein Condensates of Ytterbium Atoms. Journal of Low Temperature Physics, 2008, 150, 599-604.	1.4	7
38	Vortex States of Two-Component Bose-Einstein Condensates with and Without Internal Josephson Coupling. Journal of Low Temperature Physics, 2004, 134, 719-724.	1.4	6
39	Vortex Lattices in Rotating Bose-Einstein Condensate in an Optical Lattice: Analogy to Uniformly Frustrated Josephson-Junction Arrays. Journal of Low Temperature Physics, 2008, 150, 593-598.	1.4	6
40	Scalable Neutral Atom Quantum Computer with Interaction on Demand: Proposal for Selective Application of Two-Qubit Gate. Journal of the Physical Society of Japan, 2011, 80, 114003.	1.6	6
41	Effects of a magnetic field on vortex states in superfluid <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi mathvariant="normal">He</mml:mi><mml:mprescripts /><mml:none /><mml:mn>3</mml:mn></mml:mmultiscripts><mml:mtext>â^</mml:mtext><mml:mi>B</mml:mi></mml:mrow></mml:math>. Physical Review B, 2019, 99, .	3.2	5
42	Josephson Current Flowing in Cyclically Coupled Bose-Einstein Condensates. Journal of the Physical Society of Japan, 2000, 69, 1942-1945.	1.6	4
43	Modulation Instability and Pattern Formation in Two-component Bose-Einstein Condensates. Journal of Low Temperature Physics, 2005, 138, 669-674.	1.4	4
44	Dynamical Properties of Vortices in a Bose-Einstein Condensate in a Rotating Lattice. Journal of Low Temperature Physics, 2007, 148, 357-361.	1.4	4
45	Vortex Nucleation and Array Formation in a Rotating Bose-Einstein Condensate. Journal of Low Temperature Physics, 2002, 126, 461-466.	1.4	3
46	Dynamics of Quantized Vortices in Superfluid Helium and Rotating Bose-Einstein Condensates. Journal of Low Temperature Physics, 2005, 138, 471-480.	1.4	3
47	Application of the inhomogeneous Kibble-Zurek mechanism to quench dynamics in the transition from a Mott insulator to a superfluid in a finite system. Physical Review A, 2021, 103, .	2.5	3
48	Connection of Vortices Between Spatially Different Phases in Two-Component Bose-Einstein Condensates. Journal of Low Temperature Physics, 2010, 158, 99-104.	1.4	2
49	Dynamics of Two Quantized Vortices Belonging to Different Components of Binary Boseâ€“Einstein Condensates in a Circular Box Potential. Journal of the Physical Society of Japan, 2022, 91, .	1.6	2
50	Quantum droplet of a two-component Bose gas in an optical lattice near the Mott insulator transition. Physical Review A, 2022, 105, .	2.5	2
51	Collective Shape Oscillation and Domain Formation of Two-Component Boseâ€“Einstein Condensates. Journal of Low Temperature Physics, 2004, 134, 677-682.	1.4	1
52	Vortex Structures in Rotating Two-Component Bose-Einstein Condensates in an Anharmonic Trapping Potential. AIP Conference Proceedings, 2006, , .	0.4	1
53	Shear-flow Instability inÂTwo-component Bose-Einstein Condensates. Journal of Low Temperature Physics, 2010, 158, 384-390.	1.4	1
54	Semiclassical dynamics of a dark soliton in a one-dimensional bosonic superfluid in an optical lattice. Physical Review Research, 2020, 2, .	3.6	1

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55	Macroscopic Quantum Tunneling of Two-Component Bose-Einstein Condensates. Journal of Low Temperature Physics, 2002, 126, 437-442.	1.4	0
56	BOSONS IN AN OPTICAL LATTICE WITH A SYNTHETIC MAGNETIC FIELD. , 2012, , .		0
57	ATOMIC QUANTUM SIMULATIONS OF LATTICE GAUGE THEORY: EFFECT OF GAUGE SYMMETRY BREAKING. , 2014, , .		0
58	Vorticity Distribution in Quantum Kelvinâ€“Helmholtz Instability of Binary Boseâ€“Einstein Condensates. Journal of Low Temperature Physics, 0, , 1.	1.4	0