Nicholas G Parker

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5859909/publications.pdf

Version: 2024-02-01

96	2,170	182225	299063
papers	citations	30	42
		h-index	g-index

99	99	99	1688
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Inference for epidemic models with timeâ€varying infection rates: Tracking the dynamics of oak processionary moth in the UK. Ecology and Evolution, 2022, 12, e8871.	0.8	7
2	OCT4 expression in human embryonic stem cells: spatio-temporal dynamics and fate transitions. Physical Biology, 2021, 18, 026003.	0.8	6
3	Classical and quantum vortex leapfrogging in two-dimensional channels. Journal of Fluid Mechanics, 2021, 912, .	1.4	0
4	Estimating the asphaltene critical nanoaggregation concentration region using ultrasonic measurements and Bayesian inference. Scientific Reports, 2021, 11, 6698.	1.6	4
5	Mesoscale helicity distinguishes Vinen from Kolmogorov turbulence in helium-II. Physical Review B, 2021, 103, .	1.1	3
6	Dynamics of a degenerate Cs-Yb mixture with attractive interspecies interactions. Physical Review Research, 2021, 3, .	1.3	6
7	A mathematical modelling framework for the regulation of intra-cellular OCT4 in human pluripotent stem cells. PLoS ONE, 2021, 16, e0254991.	1.1	3
8	Spin-up of a superfluid vortex lattice driven by rough boundaries. Physical Review B, 2020, 102, .	1.1	4
9	The recent advances in the mathematical modelling of human pluripotent stem cells. SN Applied Sciences, 2020, 2, 276.	1.5	12
10	Quantum droplets of quasi-one-dimensional dipolar Boseâ€“Einstein condensates. Journal of Physics Communications, 2020, 4, 125008.	0.5	18
11	Seeding hESCs to achieve optimal colony clonality. Scientific Reports, 2019, 9, 15299.	1.6	4
12	Inviscid diffusion of vorticity in low-temperature superfluid helium. Physical Review B, 2019, 99, .	1.1	4
13	Vortex lattice formation in dipolar Bose-Einstein condensates via rotation of the polarization. Physical Review A, 2019, 100, .	1.0	14
14	Crossover from interaction to driven regimes in quantum vortex reconnections. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 12204-12211.	3.3	29
15	Instability of Rotationally Tuned Dipolar Bose-Einstein Condensates. Physical Review Letters, 2019, 122, 050401.	2.9	17
16	Quantification of the morphological characteristics of hESC colonies. Scientific Reports, 2019, 9, 17569.	1.6	27
17	Early warning signals in plant disease outbreaks. Ecological Modelling, 2019, 393, 12-19.	1.2	27
18	Quantum Ferrofluid Turbulence. Physical Review Letters, 2018, 121, 174501.	2.9	11

#	Article	IF	Citations
19	Probing quasi-integrability of the Grossâ€“Pitaevskii equation in a harmonic-oscillator potential. Journal of Physics B: Atomic, Molecular and Optical Physics, 2018, 51, 205303.	0.6	17
20	Kelvin-Helmholtz instability in a single-component atomic superfluid. Physical Review A, 2018, 97, .	1.0	16
21	Correlated random walks of human embryonic stem cells in vitro. Physical Biology, 2018, 15, 056006.	0.8	10
22	Diffusion of quantum vortices. Physical Review A, 2018, 98, .	1.0	5
23	Vortices and vortex lattices in quantum ferrofluids. Journal of Physics Condensed Matter, 2017, 29, 103004.	0.7	31
24	Matter-wave dark solitons in boxlike traps. Physical Review A, 2017, 95, .	1.0	12
25	Engineering bright matter-wave solitons of dipolar condensates. New Journal of Physics, 2017, 19, 023019.	1.2	17
26	Superfluid Boundary Layer. Physical Review Letters, 2017, 118, 135301.	2.9	35
27	Determination of Asphaltene Critical Nanoaggregate Concentration Region Using Ultrasound Velocity Measurements. Scientific Reports, 2017, 7, 16125.	1.6	15
28	Dynamics of single human embryonic stem cells and their pairs: a quantitative analysis. Scientific Reports, 2017, 7, 570.	1.6	12
29	Interaction-sensitive oscillations of dark solitons in trapped dipolar condensates. Physical Review A, 2017, 95, .	1.0	8
30	Geometric distortion of area in medical ultrasound images. Journal of Physics: Conference Series, 2017, 797, 012002.	0.3	2
31	MI-Sim: A MATLAB package for the numerical analysis of microbial ecological interactions. PLoS ONE, 2017, 12, e0173249.	1.1	3
32	Superfluids Hit the Street. Physics Magazine, 2016, 9, .	0.1	0
33	Ultraquantum turbulence in a quenched homogeneous Bose gas. Physical Review A, 2016, 94, .	1.0	14
34	A Primer on Quantum Fluids. SpringerBriefs in Physics, 2016, , .	0.2	62
35	Transition from vortices to solitonic vortices in trapped atomic Bose-Einstein condensates. Physical Review A, 2016, 94, .	1.0	5
36	Vortices and Rotation. SpringerBriefs in Physics, 2016, , 79-110.	0.2	0

#	Article	IF	Citations
37	Stochastic growth dynamics and composite defects in quenched immiscible binary condensates. Physical Review A, 2016, 93, .	1.0	26
38	Critical velocity for vortex nucleation in a finite-temperature Bose gas. Physical Review A, 2016, 93, .	1.0	7
39	Exploring the stability and dynamics of dipolar matter-wave dark solitons. Physical Review A, 2016, 93, .	1.0	23
40	Emergent behaviour in a chlorophenol-mineralising three-tiered microbial â€˜food webâ€™. Journal of Theoretical Biology, 2016, 389, 171-186.	0.8	22
41	Vorticity, Variance, and the Vigor of Many-Body Phenomena in Ultracold Quantum Systems: MCTDHB and MCTDH-X. , 2016, , 79-96.		3
42	Controllable nonlocal interactions between dark solitons in dipolar condensates. Physical Review A, 2015, 92, .	1.0	33
43	Classical-like wakes past elliptical obstacles in atomic Bose-Einstein condensates. Journal of Physics: Conference Series, 2015, 594, 012044.	0.3	15
44	Generation and decay of two-dimensional quantum turbulence in a trapped Bose-Einstein condensate. Physical Review A, 2015, 91, .	1.0	51
45	Equilibration of a finite-temperature binary Bose gas formed by population transfer. Physical Review A, 2014, 90, .	1.0	3
46	Vortex reconnections in atomic condensates at finite temperature. Physical Review A, 2014, 90, .	1.0	34
47	Quantum analogues of classical wakes in Boseâ€“Einstein condensates. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 095304.	0.6	37
48	Isotropic vortex tangles in trapped atomic Bose-Einstein condensates via laser stirring. Physical Review A, 2014, 89, .	1.0	8
49	A Phenomenological Model of the Growth of Two-Species Atomic Bose-Einstein Condensates. Journal of Physics: Conference Series, 2014, 497, 012029.	0.3	9
50	Vortices in the two-dimensional dipolar Bose gas. Journal of Physics: Conference Series, 2014, 497, 012025.	0.3	10
51	Quantum turbulence in atomic Bose-Einstein condensates. Journal of Physics: Conference Series, 2014, 544, 012023.	0.3	9
52	Anisotropic and Long-Range Vortex Interactions in Two-Dimensional Dipolar Bose Gases. Physical Review Letters, 2013, 111, 170402.	2.9	40
53	Post-processing of polymer foam tissue scaffolds with high power ultrasound: A route to increased pore interconnectivity, pore size and fluid transport. Materials Science and Engineering C, 2013, 33, 4825-4832.	3.8	18
54	Ultrasonic and acoustic microscopy: principles and applications to food microstructures. , 2013, , 192-222.		4

#	Article	IF	Citations
55	Equilibrium solutions for immiscible two-species Bose-Einstein condensates in perturbed harmonic traps. Physical Review A, 2013, 87, .	1.0	44
56	Application of a maximum likelihood algorithm to ultrasound modulated optical tomography. Journal of Biomedical Optics, 2012, 17, 026014.	1.4	5
57	Coherent cross talk and parametric driving of matter-wave vortices. Physical Review A, 2012, 86, .	1.0	13
58	p-wave stabilization of three-dimensional Bose-Fermi solitons. Physical Review A, 2012, 85, .	1.0	6
59	Bright Solitary Matter Waves: Formation, Stability and Interactions. Progress in Optical Science and Photonics, 2012, , 403-455.	0.3	1
60	Acoustic microscopy in the food industry. IOP Conference Series: Materials Science and Engineering, 2012, 42, 012006.	0.3	0
61	Ultrasonic study of the gelation of gelatin: Phase diagram, hysteresis and kinetics. Food Hydrocolloids, 2012, 26, 99-107.	5.6	73
62	Temperature dependence of bulk viscosity in water using acoustic spectroscopy. Journal of Physics: Conference Series, 2011, 269, 012011.	0.3	119
63	Application of a maximum likelihood algorithm to ultrasound modulated optical tomography. , 2011, , .		1
64	A preliminary study of acoustic propagation in thick foam tissue scaffolds composed of poly(lactic-co-glycolic acid). Journal of Physics: Conference Series, 2011, 269, 012019.	0.3	2
65	Characterization of tissue scaffolds using optics and ultrasound. Proceedings of SPIE, 2011, , .	0.8	3
66	Synthetic magnetohydrodynamics in Bose-Einstein condensates and routes to vortex nucleation. Physical Review A, 2011, 84, .	1.0	4
67	Longitudinal acoustic properties of poly(lactic acid) and poly(lactic- co -glycolic acid). Biomedical Materials (Bristol), 2010, 5, 055004.	1.7	43
68	Collective excitation frequencies and stationary states of trapped dipolar Bose-Einstein condensates in the Thomas-Fermi regime. Physical Review A, 2010, 82, .	1.0	35
69	A versatile scanning acoustic platform. Measurement Science and Technology, 2010, 21, 045901.	1.4	15
70	Dark soliton decay due to trap anharmonicity in atomic Bose-Einstein condensates. Physical Review A, 2010, 81, .	1.0	32
71	10.1007/s11490-008-3022-6. , 2010, 18, 322.		0
72	Exact solutions and stability of rotating dipolar Bose-Einstein condensates in the Thomas-Fermi limit. Physical Review A, 2009, 80, .	1.0	28

#	Article	IF	Citations
73	Bright solitary waves of trapped atomic Boseâ€“Einstein condensates. Physica D: Nonlinear Phenomena, 2009, 238, 1456-1461.	1.3	24
74	Quantum reflection of bright matter-wave solitons. Physica D: Nonlinear Phenomena, 2009, 238, 1299-1305.	1.3	47
75	Structure formation during the collapse of a dipolar atomic Bose-Einstein condensate. Physical Review A, 2009, 79, .	1.0	62
76	Thomas-Fermi versus one- and two-dimensional regimes of a trapped dipolar Bose-Einstein condensate. Physical Review A, 2008, 78, .	1.0	44
77	Instabilities and vortex-lattice formation in rotating conventional and dipolar dilute-gas Bose-Einstein condensates. Laser Physics, 2008, 18, 322-330.	0.6	5
78	Collisions of bright solitary matter waves. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 045303.	0.6	52
79	Collapse times of dipolar Bose-Einstein condensates. Physical Review A, 2008, 78, .	1.0	32
80	Bright solitary waves of atomic Bose-Einstein condensates under rotation. Physical Review A, 2008, 77, .	1.0	10
81	Spatial coherent transport of interacting dilute Bose gases. Physical Review A, 2008, 77, .	1.0	80
82	Vortices in Bose-Einstein Condensates: Theory. , 2008, , 173-189.		3
83	Bright solitary waves and trapped solutions in Boseâ€“Einstein condensates with attractive interactions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 3127-3142.	0.6	32
84	Rotation of an atomic Boseâ€“Einstein condensate with and without a quantized vortex. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 3615-3628.	0.6	10
85	Dynamical Instability of a Rotating Dipolar Bose-Einstein Condensate. Physical Review Letters, 2007, 98, 150401.	2.9	46
86	Response of an atomic Boseâ€“Einstein condensate to a rotating elliptical trap. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 43-55.	0.6	16
87	Instabilities leading to vortex lattice formation in rotating Bose-Einstein condensates. Physical Review A, 2006, 73, .	1.0	26
88	Decay of quantised vorticity by sound emission. Journal of Low Temperature Physics, 2005, 138, 629-634.	0.6	42
89	Emergence and Decay of Turbulence in Stirred Atomic Bose-Einstein Condensates. Physical Review Letters, 2005, 95, 145301.	2.9	111
90	Analogies between dark solitons in atomic Boseâ€“Einstein condensates and optical systems. Journal of Optics B: Quantum and Semiclassical Optics, 2004, 6, S380-S391.	1.4	48

#	Article	IF	Citations
91	Controlled Vortex-Sound Interactions in Atomic Bose-Einstein Condensates. Physical Review Letters, 2004, 92, 160403.	2.9	55
92	Parametric Driving of Dark Solitons in Atomic Bose-Einstein Condensates. Physical Review Letters, 2004, 93, 130408.	2.9	42
93	Dynamical instability of a dark soliton in a quasi-one-dimensional Boseâ€“Einstein condensate perturbed by an optical lattice. Journal of Physics B: Atomic, Molecular and Optical Physics, 2004, 37, S175-S185.	0.6	37
94	Soliton-Sound Interactions in Quasi-One-Dimensional Bose-Einstein Condensates. Physical Review Letters, 2003, 90, 220401.	2.9	72
95	Deformation of dark solitons in inhomogeneous Boseâ€“Einstein condensates. Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, 2891-2910.	0.6	36
96	Quantum Turbulence in Atomic Bose-Einstein Condensates. , 0, , 348-370.		0