Sergey V Nazarenko

List of Publications by Year
in descending order

129	4,168	94433	123424
papers	citations	37 h-index	61 g-index

135	135	135	1568
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Equilibria and condensates in Rossby and drift wave turbulence. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 015701.	2.1	3
2	Inverse cascade anomalies in fourth-order Leith models. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 015702.	2.1	1
3	Theory of anisotropic superfluid⁴He counterflow turbulence. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, 20210094.	3.4	1
4	Comment on â€œTheoretical analysis of quantum turbulence using the Onsager ideal turbulence theoryâ€• Physical Review E, 2022, 105, 027101.	2.1	2
5	Nonequilibrium Bose-Einstein condensation. Physical Review A, 2022, 105, .	2.5	6
6	Vortex creation, annihilation, and nonlinear dynamics in atomic vapors. Physical Review A, 2022, 105, .	2.5	8
7	Energy Spectrum of Two-Dimensional Acoustic Turbulence. Physical Review Letters, 2022, 128, .	7.8	15
8	Testing wave turbulence theory for the Gross-Pitaevskii system. Physical Review E, 2022, 106, .	2.1	11
9	Direct Evidence of a Dual Cascade in Gravitational Wave Turbulence. Physical Review Letters, 2021, 127, 131101.	7.8	9
10	Investigation of properties of superfluid <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>He</mml:mi><mml:mprescripts /><mml:none /><mml:mn>4</mml:mn></mml:mmultiscripts></mml:math> turbulence using a hot-wire signal. Physical Review Fluids, 2021, 6, .	2.5	3
11	Numerical analysis of a self-similar turbulent flow in Boseâ€“Einstein condensates. Communications in Nonlinear Science and Numerical Simulation, 2021, 102, 105903.	3.3	14
12	Wave turbulence in self-gravitating Bose gases and nonlocal nonlinear optics. Physical Review A, 2020, 102, .	2.5	15
13	A Plausible Model of Inflation Driven by Strong Gravitational Wave Turbulence. Universe, 2020, 6, 98.	2.5	3
14	Breaking of Josephson junction oscillations and onset of quantum turbulence in Boseâ€“Einstein condensates. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 175701.	2.1	11
15	Magnus-force model for active particles trapped on superfluid vortices. Physical Review A, 2020, 101, .	2.5	19
16	Steady states in dual-cascade wave turbulence. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 365701.	2.1	2
17	How trapped particles interact with and sample superfluid vortex excitations. Physical Review Research, 2020, 2, .	3.6	10
18	Phase transition in time-reversible Navier-Stokes equations. Physical Review E, 2019, 100, 043104.	2.1	12

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19	On the Wave Turbulence Theory for the Nonlinear SchrÃ¶dinger Equation with Random Potentials. Entropy, 2019, 21, 823.	2.2	10
20	Rotating magnetohydrodynamic turbulence. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 445501.	2.1	3
21	Nonlinear diffusion models for gravitational wave turbulence. Physica D: Nonlinear Phenomena, 2019, 390, 84-88.	2.8	13
22	Nonstationary distributions of wave intensities in wave turbulence. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 355502.	2.1	3
23	Turbulence of Weak Gravitational Waves in the Early Universe. Physical Review Letters, 2017, 119, 221101.	7.8	39
24	Self-similar evolution of Alfven wave turbulence. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 435501.	2.1	9
25	Non-equilibrium cluster growth: where did it all begin. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 431003.	2.1	0
26	Steady states in Leith's model of turbulence. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 365501.	2.1	4
27	Wave Turbulence on Water Surface. Annual Review of Condensed Matter Physics, 2016, 7, 61-88.	14.5	35
28	Derivation of the Biot-Savart equation from the nonlinear SchrÃ¶dinger equation. Physical Review E, 2015, 92, 053019.	2.1	24
29	Energy and vorticity spectra in turbulent superfluid<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="normal">He</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>from<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>T</mml:mi><mml:mo>=</mml:mo><mml:mn>0</mml:mn>	3.2	33
30	Wave-turbulence description of interacting particles: Klein-Gordon model with a Mexican-hat potential. Physical Review E, 2015, 92, 012909.	2.1	1
31	Wave turbulence. Contemporary Physics, 2015, 56, 359-373.	1.8	52
32	Rossby and drift wave turbulence and zonal flows: The Charneyâ€“Hasegawaâ€“Mima model and its extensions. Physics Reports, 2015, 604, 1-71.	25.6	34
33	Anomalous spectral laws in differential models of turbulence. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 285501.	2.1	20
34	Invariant solutions for the nonlinear diffusion model of turbulence. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 185501.	2.1	18
35	Wave turbulence in the two-layer ocean model. Journal of Fluid Mechanics, 2014, 756, 309-327.	3.4	2
36	Wave turbulence in quantum fluids. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4727-4734.	7.1	28

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37	Bose-Einstein condensation and Berezinskii-Kosterlitz-Thouless transition in the two-dimensional nonlinear SchrÃ¶dinger model. Physical Review A, 2014, 90, .	2.5	35
38	Quadratic invariants for discrete clusters of weakly interacting waves. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 245501.	2.1	11
39	Zonal flow generation and its feedback on turbulence production in drift wave turbulence. Physics of Plasmas, 2013, 20, .	1.9	21
40	Weak AlfvÃ©n-wave turbulence revisited. Physical Review E, 2012, 85, 036406.	2.1	19
41	The modulational instability in the extended Hasegawa-Mima equation with a finite Larmor radius. Physics of Plasmas, 2012, 19, 122115.	1.9	12
42	Dual non-Kolmogorov cascades in a von KÃ¡rmÃ¡n flow. Europhysics Letters, 2012, 100, 44003.	2.0	22
43	Warm cascade states in a forced-dissipated Boltzmann gas of hard spheres. Physica D: Nonlinear Phenomena, 2012, 241, 600-615.	2.8	7
44	Comment on â€œSymmetry of Kelvin-wave dynamics and the Kelvin-wave cascade in theT=0superfluid turbulenceâ€• Physical Review B, 2012, 86, .	3.2	8
45	Sustained turbulence in the three-dimensional Grossâ€“Pitaevskii model. Physica D: Nonlinear Phenomena, 2012, 241, 304-314.	2.8	32
46	One-dimensional optical wave turbulence: Experiment and theory. Physics Reports, 2012, 514, 121-175.	25.6	74
47	Feedback of zonal flows on wave turbulence driven by small-scale instability in the Charney-Hasegawa-Mima model. Europhysics Letters, 2011, 96, 25001.	2.0	20
48	Critical balance in magnetohydrodynamic, rotating and stratified turbulence: towards a universal scaling conjecture. Journal of Fluid Mechanics, 2011, 677, 134-153.	3.4	87
49	Wave Turbulence Formalism. Lecture Notes in Physics, 2011, , 67-105.	0.7	3
50	Magneto-Hydrodynamic Turbulence. Lecture Notes in Physics, 2011, , 209-230.	0.7	0
51	Finite-Size Effects in Wave Turbulence. Lecture Notes in Physics, 2011, , 163-171.	0.7	1
52	Steady State and Evolving Solutions for the Wave Spectrum. Lecture Notes in Physics, 2011, , 133-161.	0.7	0
53	For the Impatient: A WT Cheatsheet. Lecture Notes in Physics, 2011, , 29-48.	0.7	0
54	Wave Turbulence as a Part of General Turbulence Theory. Lecture Notes in Physics, 2011, , 17-28.	0.7	0

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55	Bose-Einstein Condensation. Lecture Notes in Physics, 2011, , 231-268.	0.7	0
56	Properties of the Higher-Order Statistics. Intermittency and WT Life Cycle. Lecture Notes in Physics, 2011, , 173-184.	0.7	0
57	Statistical Objects in Wave Turbulence. Lecture Notes in Physics, 2011, , 55-66.	0.7	0
58	Nonlocal Drift/Rossby Wave Turbulence. Lecture Notes in Physics, 2011, , 191-208.	0.7	0
59	List of Projects. Lecture Notes in Physics, 2011, , 269-279.	0.7	1
60	Exact solution for the energy spectrum of Kelvin-wave turbulence in superfluids. Physical Review B, 2011, 84, .	3.2	42
61	Warm turbulence in the Boltzmann equation. Europhysics Letters, 2011, 96, 24004.	2.0	2
62	Wave Turbulence. Lecture Notes in Physics, 2011, , .	0.7	480
63	Modulational instability of Rossby and drift waves and generation of zonal jets. Journal of Fluid Mechanics, 2010, 654, 207-231.	3.4	56
64	Statistics of surface gravity wave turbulence in the space and time domains. Journal of Fluid Mechanics, 2010, 642, 395-420.	3.4	66
65	Reply: On Role of Symmetries in Kelvin Wave Turbulence. Journal of Low Temperature Physics, 2010, 161, 606-610.	1.4	18
66	Weak turbulence of Kelvin waves in superfluid He. Low Temperature Physics, 2010, 36, 785-791.	0.6	17
67	Interaction of Kelvin waves and nonlocality of energy transfer in superfluids. Physical Review B, 2010, 81, .	3.2	59
68	Comment on â€œSuperfluid Turbulence from Quantum Kelvin Wave to Classical Kolmogorov Cascadesâ€• Physical Review Letters, 2010, 104, 219401.	7.8	5
69	Publisherâ€™s Note: Triple Cascade Behavior in Quasigeostrophic and Drift Turbulence and Generation of Zonal Jets [Phys. Rev. Lett.103, 118501 (2009)]. Physical Review Letters, 2010, 104, .	7.8	0
70	Triple cascade behaviour in QG and drift turbulence and generation of zonal jets. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, , 265-288.	0.2	0
71	Triple Cascade Behavior in Quasigeostrophic and Drift Turbulence and Generation of Zonal Jets. Physical Review Letters, 2009, 103, 118501.	7.8	36
72	Gravity Wave Turbulence in Wave Tanks: Space and Time Statistics. Physical Review Letters, 2009, 103, 044501.	7.8	34

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73	Modeling Kelvin Wave Cascades in Superfluid Helium. Journal of Low Temperature Physics, 2009, 156, 193-214.	1.4	41
74	Canonical Hamiltonians for waves in inhomogeneous media. Journal of Mathematical Physics, 2009, 50, 013527.	1.1	6
75	Optical wave turbulence and the condensation of light. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 2280.	2.1	67
76	Quantum turbulence cascades in the Gross-Pitaevskii model. Physical Review A, 2009, 80, .	2.5	56
77	Aspects of Two-Mode Probability Density Function in Weak Wave Turbulence. Journal of the Physical Society of Japan, 2009, 78, 084403.	1.6	6
78	Gradual Eddy-Wave Crossover in Superfluid Turbulence. Journal of Low Temperature Physics, 2008, 153, 140-161.	1.4	40
79	Coalescence of Particles by Differential Sedimentation. Journal of Statistical Physics, 2008, 130, 1177-1195.	1.2	12
80	Resonant interactions of nonlinear water waves in a finite basin. Physical Review E, 2008, 78, 016304.	2.1	23
81	Gregory Falkovich. Introduction to turbulence theory. , 2008, , 1-43.		3
82	2D enslaving of MHD turbulence. New Journal of Physics, 2007, 9, 307-307.	2.9	24
83	Gravity Wave Turbulence in a Laboratory Flume. Physical Review Letters, 2007, 99, 014501.	7.8	100
84	Freely decaying Turbulence and Boseâ€“Einstein Condensation in Grossâ€“Pitaevski Model. Journal of Low Temperature Physics, 2007, 146, 31-46.	1.4	51
85	Sandpile behaviour in discrete water-wave turbulence. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, L02002-L02002.	2.3	45
86	Discreteness and its effect on water-wave turbulence. Physica D: Nonlinear Phenomena, 2006, 218, 24-35.	2.8	59
87	Wave turbulence and vortices in Boseâ€“Einstein condensation. Physica D: Nonlinear Phenomena, 2006, 219, 1-12.	2.8	87
88	Energy Spectra of Developed Turbulence in Helium Superfluids. Journal of Low Temperature Physics, 2006, 145, 125-142.	1.4	59
89	Dynamics of the Boseâ€“Einstein condensation. Physica D: Nonlinear Phenomena, 2005, 201, 203-211.	2.8	73
90	Anomalous probability of large amplitudes in wave turbulence. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 339, 361-369.	2.1	49

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91	Joint statistics of amplitudes and phases in wave turbulence. Physica D: Nonlinear Phenomena, 2005, 201, 121-149.	2.8	52
92	Noisy spectra, long correlations, and intermittency in wave turbulence. Physical Review E, 2004, 69, 066608.	2.1	41
93	Warm Cascades and Anomalous Scaling in a Diffusion Model of Turbulence. Physical Review Letters, 2004, 92, 044501.	7.8	82
94	Fast numerical simulations of 2D turbulence using a dynamic model for subfilter motions. Journal of Computational Physics, 2004, 196, 184-207.	3.8	14
95	Probability densities and preservation of randomness in wave turbulence. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 332, 230-238.	2.1	37
96	A model for rapid stochastic distortions of small-scale turbulence. Journal of Fluid Mechanics, 2004, 520, 1-21.	3.4	17
97	Analytical Solution for Nonlinear SchrÃ¶dinger Vortex Reconnection. Journal of Low Temperature Physics, 2003, 132, 1-10.	1.4	45
98	Dimensional analysis and weak turbulence. Physica D: Nonlinear Phenomena, 2003, 184, 86-97.	2.8	58
99	Wave turbulence in Boseâ€“Einstein condensates. Physica D: Nonlinear Phenomena, 2003, 184, 333-351.	2.8	44
100	Analytical Solution for Nonlinear SchrÃ¶dinger Vortex Reconnection. , 2003, 132, 1.		1
101	Shock bowing and vorticity dynamics during propagation into different transverse density profiles. Physica D: Nonlinear Phenomena, 2002, 163, 150-165.	2.8	11
102	Wave turbulence and intermittency. Physica D: Nonlinear Phenomena, 2001, 152-153, 520-550.	2.8	197
103	Non-local MHD turbulence. Physica D: Nonlinear Phenomena, 2001, 152-153, 646-652.	2.8	32
104	Breakdown of wave turbulence and the onset of intermittency. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 280, 28-32.	2.1	44
105	Discreteness and quasiresonances in weak turbulence of capillary waves. Physical Review E, 2001, 63, 046306.	2.1	32
106	Non-local two-dimensional turbulence and Batchelor's regime for passive scalars. Journal of Fluid Mechanics, 2000, 408, 301-321.	3.4	28
107	A weak turbulence theory for incompressible magnetohydrodynamics. Journal of Plasma Physics, 2000, 63, 447-488.	2.1	526
108	Exact solutions for near-wall turbulence theory. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 264, 444-448.	2.1	19

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109	Dynamical modeling of sub-grid scales in 2D turbulence. Physica D: Nonlinear Phenomena, 2000, 142, 231-253.	2.8	20
110	Nonlinear RDT theory of near-wall turbulence. Physica D: Nonlinear Phenomena, 2000, 139, 158-176.	2.8	39
111	Nonlocality of Interaction of Scales in the Dynamics of 2D Incompressible Fluids. Physical Review Letters, 1999, 83, 4061-4064.	7.8	25
112	WKB theory for rapid distortion of inhomogeneous turbulence. Journal of Fluid Mechanics, 1999, 390, 325-348.	3.4	39
113	The circulation density and its role in 3D turbulence. Physica D: Nonlinear Phenomena, 1997, 102, 343-348.	2.8	2
114	Interaction of turbulence and large-scale vortices in incompressible 2D fluids. Physica D: Nonlinear Phenomena, 1997, 110, 123-138.	2.8	38
115	Resonant absorption of short pulses. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 197, 159-163.	2.1	10
116	Nonlinear soundâ€“vortex interactions in an inviscid isentropic fluid: A twoâ€fluid model. Physics of Fluids, 1995, 7, 2407-2419.	4.0	17
117	Nazarenko Replies:. Physical Review Letters, 1995, 75, 1868-1868.	7.8	0
118	Communication with reentry space vehicles via short pulses. Radio Science, 1995, 30, 1753-1766.	1.6	5
119	On Scaling Laws for the Transition to Turbulence in Uniform-Shear Flows. Europhysics Letters, 1994, 27, 129-134.	2.0	18
120	Nonlinear interaction of smallâ€scale Rossby waves with an intense largeâ€scale zonal flow. Physics of Fluids, 1994, 6, 1158-1167.	4.0	22
121	Absorption of Sound by Vortex Filaments. Physical Review Letters, 1994, 73, 1793-1796.	7.8	10
122	Communication through plasma sheaths via Raman (threeâ€wave) scattering process. Physics of Plasmas, 1994, 1, 2827-2834.	1.9	38
123	The role of the convective modes and sheared variables in the Hamiltonian dynamics of uniform-shear-flow perturbations. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 191, 403-408.	2.1	4
124	Wave-vortex dynamics in drift and Î²-plane turbulence. Physics Letters, Section A: General, Atomic and Solid State Physics, 1992, 165, 330-334.	2.1	40
125	Kinetic equation for point vortices in a shear flow. Physica D: Nonlinear Phenomena, 1992, 56, 381-388.	2.8	12
126	New invariant for drift turbulence. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 152, 276-280.	2.1	45

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127	On the nonlocal turbulence of drift type waves. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 146, 217-221.	2.1	42
128	Kolmogorov weakly turbulent spectra of some types of drift waves in plasmas. Physics Letters, Section A: General, Atomic and Solid State Physics, 1988, 133, 407-409.	2.1	7
129	Verifying Weak Turbulence Theory. Physics Magazine, 0, 13, .	0.1	0