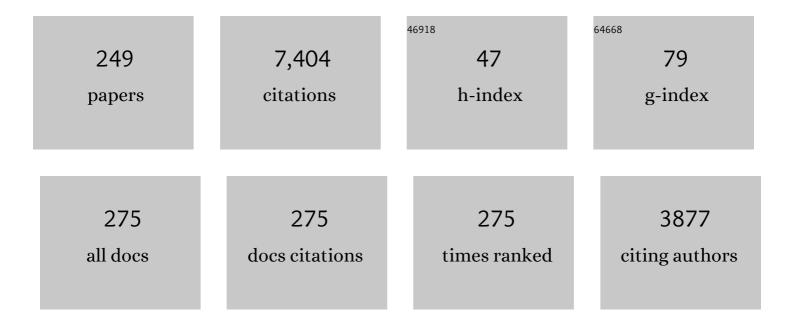
List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8796350/publications.pdf

Version: 2024-02-01



#	Article	IF	CITATIONS
1	Vibrational resonance. Journal of Physics A, 2000, 33, L433-L438.	1.6	354
2	Observation of an Inverse Energy Cascade in Developed Acoustic Turbulence in Superfluid Helium. Physical Review Letters, 2008, 101, 065303.	2.9	336
3	Nonlinear dynamics of cardiovascular ageing. Physics Reports, 2010, 488, 51-110.	10.3	315
4	Generation of defects in superfluid 4He as an analogue of the formation of cosmic strings. Nature, 1994, 368, 315-317.	13.7	224
5	Bistability driven by colored noise: Theory and experiment. Physical Review A, 1985, 32, 695-698.	1.0	206
6	Stochastic resonance in perspective. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1995, 17, 661-683.	0.4	178
7	Reversible Transitions between Synchronization States of the Cardiorespiratory System. Physical Review Letters, 2000, 85, 4831-4834.	2.9	160
8	Analogue studies of nonlinear systems. Reports on Progress in Physics, 1998, 61, 889-997.	8.1	158
9	Comment on â€~â€~Stochastic resonance in bistable systems''. Physical Review Letters, 1990, 65, 2606-2	26 0 0.	151
10	Irreversibility of classical fluctuations studied in analogue electrical circuits. Nature, 1997, 389, 463-466.	13.7	136
11	Inference of Time-Evolving Coupled Dynamical Systems in the Presence of Noise. Physical Review Letters, 2012, 109, 024101.	2.9	131
12	Optimal paths and the prehistory problem for large fluctuations in noise-driven systems. Physical Review Letters, 1992, 68, 2718-2721.	2.9	128
13	Extraction of instantaneous frequencies from ridges in time–frequency representations of signals. Signal Processing, 2016, 125, 290-303.	2.1	127
14	Nonappearance of Vortices in Fast Mechanical Expansions of Liquid4Hethrough the Lambda Transition. Physical Review Letters, 1998, 81, 3703-3706.	2.9	122
15	Oscillatory dynamics of vasoconstriction and vasodilation identified by time-localized phase coherence. Physics in Medicine and Biology, 2011, 56, 3583-3601.	1.6	120
16	Interactions between cardiac, respiratory and EEG-δ oscillations in rats during anaesthesia. Journal of Physiology, 2007, 580, 315-326.	1.3	105
17	Direction of Coupling from Phases of Interacting Oscillators: A Permutation Information Approach. Physical Review Letters, 2008, 100, 084101.	2.9	100
18	Rogue waves – towards a unifying concept?: Discussions and debates. European Physical Journal: Special Topics, 2010, 185, 5-15.	1.2	100

#	Article	IF	CITATIONS
19	Decay of quantized vorticity in superfluid 4He at mK temperatures. Physica B: Condensed Matter, 2000, 280, 43-44.	1.3	99
20	Low-frequency blood flow oscillations in congestive heart failure and after β1-blockade treatment. Microvascular Research, 2008, 76, 224-232.	1.1	95
21	Rogue waves in superfluid helium. European Physical Journal: Special Topics, 2010, 185, 181-193.	1.2	95
22	Evolution of cardiorespiratory interactions with age. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20110622.	1.6	95
23	Nonlinear mode decomposition: A noise-robust, adaptive decomposition method. Physical Review E, 2015, 92, 032916.	0.8	94
24	Positive-Ionic Mobility and a Hierarchy of Ions in Normal LiquidHe3. Physical Review Letters, 1977, 39, 1544-1547.	2.9	93
25	Noise in nonlinear dynamical systems. Contemporary Physics, 1990, 31, 179-194.	0.8	91
26	What can stochastic resonance do?. Nature, 1998, 391, 344-344.	13.7	91
27	Continuous flow apparatus for preparing isotopically pure 4He. Cryogenics, 1987, 27, 131-138.	0.9	84
28	Multi-switching combination synchronization of chaotic systems. Nonlinear Dynamics, 2015, 80, 845-854.	2.7	83
29	ITÔ VERSUS STRATONOVICH: 30 YEARS LATER. Fluctuation and Noise Letters, 2012, 11, 1240010.	1.0	82
30	Inference of a Nonlinear Stochastic Model of the Cardiorespiratory Interaction. Physical Review Letters, 2005, 94, 098101.	2.9	79
31	Stochastic resonance in electrical circuits. I. Conventional stochastic resonance. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 1999, 46, 1205-1214.	2.3	75
32	Testing for time-localized coherence in bivariate data. Physical Review E, 2012, 85, 046205.	0.8	75
33	Corrals and Critical Behavior of the Distribution of Fluctuational Paths. Physical Review Letters, 1996, 77, 5229-5232.	2.9	72
34	The discriminatory value of cardiorespiratory interactions in distinguishing awake from anaesthetised states: a randomised observational study. Anaesthesia, 2015, 70, 1356-1368.	1.8	71
35	Vortex Nucleation in Isotopically Pure SuperfluidHe4. Physical Review Letters, 1980, 44, 161-164.	2.9	66
36	COHERENCE BETWEEN FLUCTUATIONS IN BLOOD FLOW AND OXYGEN SATURATION. Fluctuation and Noise Letters, 2012, 11, 1240013.	1.0	65

#	Article	IF	CITATIONS
37	Coupling functions in networks of oscillators. New Journal of Physics, 2015, 17, 035002.	1.2	65
38	Alterations in the coupling functions between cortical and cardio-respiratory oscillations due to anaesthesia with propofol and sevoflurane. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150186.	1.6	62
39	Unsolved problems of noise. Nature, 1999, 401, 23-25.	13.7	60
40	Transition to Turbulence for a Quartz Tuning Fork inÂSuperfluid 4He. Journal of Low Temperature Physics, 2009, 156, 116-131.	0.6	59
41	An apparatus for preparing isotopically pure He4. Cryogenics, 1978, 18, 201-208.	0.9	55
42	Zero-dispersion phenomena in oscillatory systems. Physics Reports, 2003, 373, 247-408. Excimers <mmkmath <="" td="" xmlns:mml="http://www.w3.org/1998/Math/MathML"><td>10.3</td><td>55</td></mmkmath>	10.3	55
43	display="inline"> <mml:msubsup><mml:mi>He</mml:mi><mml:mn>2</mml:mn><mml:mo>"</mml:mo>Tracers of Quantum Turbulence in<mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline"><mml:mmultiscripts><mml:mi>He</mml:mi><mml:mprescripts></mml:mprescripts><mml:none /><mml:mn>4</mml:mn></mml:none </mml:mmultiscripts></mml:math>in the<mml:math< td=""><td>1subsup>< 2.9</td><td>./mml:math>a</td></mml:math<></mml:msubsup>	1subsup>< 2.9	./mml:math>a
44	Coherence and Coupling Functions Reveal Microvascular Impairment in Treated Hypertension. Frontiers in Physiology, 2017, 8, 749.	1.3	52
45	Dynamical Bayesian inference of time-evolving interactions: From a pair of coupled oscillators to networks of oscillators. Physical Review E, 2012, 86, 061126.	0.8	50
46	Neural Cross-Frequency Coupling Functions. Frontiers in Systems Neuroscience, 2017, 11, 33.	1.2	50
47	A new form of energy dissipation by a moving object in He II. Nature, 1985, 316, 797-799.	13.7	49
48	Noise-induced escape in an excitable system. Physical Review E, 2013, 87, .	0.8	49
49	Glassy states and super-relaxation in populations of coupled phase oscillators. Nature Communications, 2014, 5, 4118.	5.8	49
50	Nonconventional stochastic resonance. Journal of Statistical Physics, 1993, 70, 479-499.	0.5	48
51	Linear response theory in stochastic resonance. Physics Letters, Section A: General, Atomic and Solid State Physics, 1993, 180, 332-336.	0.9	44
52	Coulomb blockade model of permeation and selectivity in biological ion channels. New Journal of Physics, 2015, 17, 083021.	1.2	44
53	Phase Synchronization between Several Interacting Processes from Univariate Data. Physical Review Letters, 2001, 86, 1749-1752.	2.9	42
54	Postponed bifurcations of a ring-laser model with a swept parameter and additive colored noise. Physical Review A, 1987, 35, 2560-2566.	1.0	40

#	Article	IF	CITATIONS
55	Stochastic resonance: Linear response and giant nonlinearity. Journal of Statistical Physics, 1993, 70, 463-478.	0.5	40
56	Experiments on Critical Phenomena in a Noisy Exit Problem. Physical Review Letters, 1997, 79, 3109-3112.	2.9	39
57	Fluctuations and the Energy-Optimal Control of Chaos. Physical Review Letters, 2000, 85, 2100-2103.	2.9	38
58	Observation of Saddle-Point Avoidance in Noise-Induced Escape. Physical Review Letters, 1999, 82, 1806-1809.	2.9	37
59	The effect of low-frequency oscillations on cardio-respiratory synchronization. European Physical Journal B, 2008, 65, 425-433.	0.6	37
60	Time-phase bispectral analysis. Physical Review E, 2003, 68, 016201.	0.8	36
61	Vibrational resonance in an oscillator with an asymmetrical deformable potential. Physical Review E, 2018, 98, .	0.8	36
62	Kramers Problem for a Multiwell Potential. Physical Review Letters, 2000, 84, 2556-2559.	2.9	35
63	A tutorial on time-evolving dynamical Bayesian inference. European Physical Journal: Special Topics, 2014, 223, 2685-2703.	1.2	35
64	Nonlinear behaviour of positive ions in normal liquid3He: a comparison between experiment and a parameterless theoretical prediction. Journal of Physics C: Solid State Physics, 1978, 11, L881-L885.	1.5	34
65	Resonances while surmounting a fluctuating barrier. Physical Review E, 2000, 61, 1170-1175.	0.8	34
66	Optimal positioning of field emitters for ion injection in liquid helium. Cryogenics, 1979, 19, 535-536. Behavior of quartz torks oscillating in isotopically pure simplifying the second secon	0.9	31
67	xmins:mmi= http://www.w3.org/1998/Wath/WathWL_display= inline > <mmi:msup><mmi:mrow /><mmi:mn>4</mmi:mn></mmi:mrow </mmi:msup> He in the <mmi:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mmi:mi>T</mmi:mi> // mmi:math</mmi:math 	1.1	31
68	Detecting the harmonics of oscillations with time-variable frequencies. Physical Review E, 2011, 83, 016206.	0.8	30
69	Resonant rectification of fluctuations in a Brownian ratchet. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 273, 316-321. Dissipation of Quasiclassical Turbulence in Superfluid <mml:math< td=""><td>0.9</td><td>29</td></mml:math<>	0.9	29
70	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:mrow><mml:mmultiscripts><mml:mrow><mml:mi>He</mml:mi></mml:mrow><mml:mpr /><mml:none /><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:none </mml:mpr </mml:mmultiscripts></mml:mrow> <td>escripts 2.9</td> <td>29</td>	escripts 2.9	29
71	Physical Review Letters, 2015, 115, 155303. Noiseâ€enhanced optical heterodyning in an allâ€optical bistable system. Applied Physics Letters, 1995, 67, 308-310.	1.5	28
72	Wave turbulence in quantum fluids. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4727-4734.	3.3	28

#	Article	IF	CITATIONS
73	Vibrational resonance in an inhomogeneous medium with periodic dissipation. Physical Review E, 2017, 96, 032209.	0.8	28
74	Stochastic resonance in electrical circuits. II. Nonconventional stochastic resonance. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 1999, 46, 1215-1224.	2.3	25
75	Vibrational resonances in driven oscillators with position-dependent mass. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200227.	1.6	24
76	Zero-Dispersion Nonlinear Resonance. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1997, 07, 923-936.	0.7	23
77	Noise and determinism in cardiovascular dynamics. Physica A: Statistical Mechanics and Its Applications, 2002, 314, 69-76.	1.2	23
78	Multi-ion conduction bands in a simple model of calcium ion channels. Physical Biology, 2013, 10, 026007. Frequency-dependent drag from quantum turbulence produced by quartz tuning forks in	0.8	23
79	superfluid <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="normal">He<mml:mprescripts></mml:mprescripts><mml:none /><mml:mrow></mml:mrow>. Physical Review</mml:none </mml:mi </mml:mmultiscripts></mml:math 	1.1	23
80	B. 2014, 89. Giant nonlinearity in the low-frequency response of a fluctuating bistable system. Physical Review E, 1993, 47, 1629-1632.	0.8	22
81	Inferential framework for nonstationary dynamics. II. Application to a model of physiological signaling. Physical Review E, 2008, 77, 061106.	0.8	22
82	Synchronization transitions caused by time-varying coupling functions. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20190275.	1.6	21
83	Measurements of two-dimensional densities for a bistable device driven by colored noise. European Physical Journal B, 1985, 61, 381-386.	0.6	20
84	Formation of a Direct Kolmogorov-Like Cascade of Second-Sound Waves in He II. Physical Review Letters, 2006, 97, 155301.	2.9	20
85	Physics of brain dynamics: Fokker–Planck analysis reveals changes in EEG δ–θ interactions in anæsthesia. New Journal of Physics, 2009, 11, 103051.	1.2	20
86	Dynamical inference: Where phase synchronization and generalized synchronization meet. Physical Review E, 2014, 89, 062909.	0.8	20
87	Quantum vibrational resonance in a dual-frequency-driven Tietz-Hua quantum well. Physical Review E, 2020, 101, 052216.	0.8	20
88	Development of turbulence in subsonic submerged jets. Physics Reports, 2004, 397, 1-62.	10.3	19
89	Turbulent drag on a low-frequency vibrating grid in superfluid <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mn>4</mml:mn></mml:mrow </mml:msup>He at very low temperatures. Physical Review B, 2012, 85</mml:math 	1.1	19
90	Vibrational and stochastic resonances in driven nonlinear systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200226.	1.6	18

#	Article	IF	CITATIONS
91	Experiments on a High Quality Grid Oscillating inÂSuperfluid 4He at Very Low Temperatures. Journal of Low Temperature Physics, 2010, 158, 462-467.	0.6	17
92	Reproducibility of LDF blood flow measurements: Dynamical characterization versus averaging. Microvascular Research, 2011, 82, 274-276.	1.1	17
93	Coupling functions: dynamical interaction mechanisms in the physical, biological and social sciences. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20190039.	1.6	17
94	Parametric vibrational resonance in a gyroscope driven by dual-frequency forces. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 387, 127040.	0.9	17
95	The effect of noise on strange nonchaotic attractors. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 268, 315-322.	0.9	16
96	Direct Measurement of the Critical Velocity AboveÂWhichÂaÂTuning Fork Generates Turbulence inÂSuperfluid Helium. Journal of Low Temperature Physics, 2010, 158, 456-461.	0.6	16
97	Energetics of discrete selectivity bands and mutation-induced transitions in the calcium-sodium ion channels family. Physical Review E, 2013, 88, 052712.	0.8	16
98	Expansion of Liquid 4He Through the Lambda Transition. Journal of Low Temperature Physics, 1999, 115, 89-105.	0.6	15
99	Synchronization of stochastic bistable systems by biperiodic signals. Physical Review E, 2007, 76, 031122.	0.8	15
100	Theory of stochastic resonance for small signals in weakly damped bistable oscillators. Physical Review E, 2008, 77, 011111.	0.8	15
101	Branch selectivity at the bifurcation of a bistable system with external noise. Physics Letters, Section A: General, Atomic and Solid State Physics, 1985, 112, 293-296.	0.9	14
102	Symmetry Breaking of Fluctuation Dynamics by Noise Color. Physical Review Letters, 2000, 84, 5470-5473.	2.9	14
103	Wavelet analysis of blood flow dynamics: effect on the individual oscillatory components of iontophoresis with pharmacologically neutral electrolytes. Physics in Medicine and Biology, 2004, 49, N111-N117.	1.6	14
104	Characterizing an ensemble of interacting oscillators: The mean-field variability index. Physical Review E, 2013, 87, 012905.	0.8	14
105	Branch selection in the presence of coloured noise. Physics Letters, Section A: General, Atomic and Solid State Physics, 1986, 114, 68-74.	0.9	13
106	Swept-parameter-induced postponements and noise on the Hopf bifurcation. Physical Review A, 1987, 36, 1492-1494.	1.0	13
107	Thermally activated escape of driven systems: the activation energy. Journal of Physics A, 1999, 32, L321-L327.	1.6	13
108	Acoustic vibrational resonance in a Rayleigh-Plesset bubble oscillator. Ultrasonics Sonochemistry, 2021, 70, 105346.	3.8	13

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109	MID-INFRARED LASING INDUCED BY NOISE. Fluctuation and Noise Letters, 2003, 03, L91-L95.	1.0	12
110	Nonlinear systems with fast and slow motions. Changes in the probability distribution for fast motions under the influence of slower ones. Physics Reports, 2013, 532, 1-26.	10.3	12
111	Hyperchaos and bifurcations in a driven Van der Pol–Duffing oscillator circuit. International Journal of Dynamics and Control, 2015, 3, 363-370.	1.5	12
112	Exploring the pore charge dependence of K ⁺ and Cl ^{â^'} permeation across a graphene monolayer: a molecular dynamics study. RSC Advances, 2019, 9, 20402-20414.	1.7	12
113	On the suitability of laser-Doppler flowmetry for capturing microvascular blood flow dynamics from darkly pigmented skin. Physiological Measurement, 2019, 40, 074005.	1.2	12
114	Velocity spectrum for non-Markovian Brownian motion in a periodic potential. Journal of Statistical Physics, 1992, 66, 1059-1070.	0.5	11
115	Large Fluctuations in a Periodically Driven Dynamical System. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1998, 08, 747-754.	0.7	11
116	Acoustic Turbulence in Superfluid 4He. Journal of Low Temperature Physics, 2009, 156, 95-115.	0.6	11
117	Observation of Crossover from Ballistic to Diffusion Regime for Excimer Molecules in Superfluid 4He. Journal of Low Temperature Physics, 2013, 171, 207-213.	0.6	11
118	A Quasiparticle Detector for Imaging Quantum Turbulence in Superfluid \$\$^3\$\$ 3 He-B. Journal of Low Temperature Physics, 2014, 175, 725-738.	0.6	11
119	Raceâ€specific differences in the phase coherence between blood flow and oxygenation: A simultaneous NIRS, white light spectroscopy and LDF study. Journal of Biophotonics, 2020, 13, e201960131.	1.1	11
120	On the damping of a vibrating grid in a viscous medium: the possible basis for an electrostatic viscometer. Journal of Physics E: Scientific Instruments, 1980, 13, 350-354.	0.7	10
121	Experimental Study of the Nonlinear Second Sound Wave Interaction in Superfluid 4He. Journal of Low Temperature Physics, 2006, 145, 155-164.	0.6	10
122	High-order synchronization, transitions, and competition among Arnold tongues in a rotator under harmonic forcing. Physical Review E, 2008, 77, 056203.	0.8	10
123	Ageing of the couplings between cardiac, respiratory and myogenic activity in humans. , 2015, 2015, 7366-9.		10
124	Anomalous positive ion mobility in liquid 3He. Physics Letters, Section A: General, Atomic and Solid State Physics, 1975, 54, 241-242.	0.9	9
125	Characteristic frequencies of the human blood distribution system. AIP Conference Proceedings, 2000, , .	0.3	9
126	Changes in the Effective Parameters of Averaged Motion in Nonlinear Systems Subject to Noise. Journal of Statistical Physics, 2006, 125, 593-620.	0.5	9

#	Article	IF	CITATIONS
127	FLUCTUATIONAL ESCAPE FROM CHAOTIC ATTRACTORS IN MULTISTABLE SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2008, 18, 1727-1739.	0.7	9
128	Welding dynamics in an atomistic model of an amorphous polymer blend with polymer–polymer interface. Journal of Polymer Science, 2020, 58, 2051-2061.	2.0	9
129	Bifurcation Analysis of Zero-Dispersion Nonlinear Resonance. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1998, 08, 701-712.	0.7	8
130	Does the Kibble Mechanism Operate in Liquid 4He?. Journal of Low Temperature Physics, 2000, 119, 249-256.	0.6	8
131	NOISE-INDUCED ESCAPE FROM THE LORENZ ATTRACTOR. Fluctuation and Noise Letters, 2001, 01, L27-L33.	1.0	8
132	Response of a Mechanical Oscillator in Solid 4He. Journal of Low Temperature Physics, 2014, 175, 140-146.	0.6	8
133	Ionic Coulomb blockade. Nature Materials, 2016, 15, 825-826.	13.3	8
134	Vibrational and stochastic resonances in driven nonlinear systems: part 2. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20210003.	1.6	8
135	Colored noise in the ringâ€laser gyroscope: Theory and simulation. Journal of Applied Physics, 1987, 62, 721-723.	1.1	7
136	Comment on "Signal-to-noise ratio gain in neuronal systems― Physical Review E, 2003, 67, 043901.	0.8	7
137	Statistical properties of strongly nonlinear waves within a resonator. Physical Review E, 2008, 78, 066611.	0.8	7
138	Ion channels as electrostatic amplifiers of charge fluctuations. Journal of Physics: Conference Series, 2008, 142, 012049.	0.3	7
139	Charge fluctuations and their effect on conduction in biological ion channels. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P01010.	0.9	7
140	Controlling current reversals in synchronized underdamped ratchets. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 165101.	0.7	7
141	NONEQUILIBRIUM RATE THEORY FOR CONDUCTION IN OPEN ION CHANNELS. Fluctuation and Noise Letters, 2012, 11, 1240016.	1.0	7
142	A NEW APPROACH TO THE TREATMENT OF SEPARATRIX CHAOS. Fluctuation and Noise Letters, 2012, 11, 1240002.	1.0	7
143	Collective dynamics of a network of ratchets coupled via a stochastic dynamical environment. Physical Review E, 2013, 87, 022913.	0.8	7
144	Regular Rather than Chaotic Origin of the Resonant Transport in Superlattices. Physical Review Letters, 2015, 114, 166802.	2.9	7

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145	Experimental Realization of the Coupling Function Secure Communications Protocol and Analysis of Its Noise Robustness. IEEE Transactions on Information Forensics and Security, 2018, 13, 2591-2601.	4.5	7
146	Novel bursting oscillations in a nonlinear gyroscope oscillator. Physica Scripta, 2022, 97, 085211.	1.2	7
147	COHERENCE RESONANCE OF THE NOISE-INDUCED MOTION ON THE WAY TO BREAKDOWN OF SYNCHRONIZATION IN CHAOTIC SYSTEMS. Fluctuation and Noise Letters, 2003, 03, L113-L120.	1.0	6
148	Role of Transdermal Potential Difference During Iontophoretic Drug Delivery. IEEE Transactions on Biomedical Engineering, 2004, 51, 1683-1685.	2.5	6
149	Quantum Turbulence in 4He, Oscillating Grids, and Where Do We Go Next?. Journal of Low Temperature Physics, 2006, 145, 107-124.	0.6	6
150	Neutron reflection from a liquid helium surface. Low Temperature Physics, 2008, 34, 316-319.	0.2	6
151	Calorimetric Observation of Single \$\$hbox {He}_2^*\$\$ Excimers in a 100-mK He Bath. Journal of Low Temperature Physics, 2017, 186, 183-196.	0.6	6
152	Ionic Coulomb blockade and the determinants of selectivity in the NaChBac bacterial sodium channel. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183301.	1.4	6
153	Ionic Coulomb blockade and anomalous mole fraction effect in the NaChBac bacterial ion channel and its charge-varied mutants. EPJ Nonlinear Biomedical Physics, 2017, 5, 4.	0.8	6
154	Dispersion of the Prehistory Distribution: Analog Experiments and Numerical Results. Physical Review Letters, 1998, 80, 2273-2276.	2.9	5
155	Ratchet driven by quasimonochromatic noise. Physical Review E, 2000, 61, 139-146.	0.8	5
156	Nonstationary Nonlinear Phenomena on the Charged Surface of Liquid Hydrogen. Journal of Low Temperature Physics, 2006, 145, 311-335.	0.6	5
157	Inferential framework for non-stationary dynamics: theory and applications. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P01025.	0.9	5
158	Putative resolution of the EEEE selectivity paradox in L-type Ca ²⁺ and bacterial Na ⁺ biological ion channels. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 054027.	0.9	5
159	The origins of life on Earth. Contemporary Physics, 2016, 57, 93-95.	0.8	5
160	Relation between selectivity and conductivity in narrow ion channels. , 2017, , .		5
161	Theory and Experiments on Multi-Ion Permeation and Selectivity in the NaChBac Ion Channel. Fluctuation and Noise Letters, 2019, 18, 1940007.	1.0	5
162	Preparation of isotopically pure superfluid 4He suitable for constructing a high density neutron source. Physics Letters, Section A: General, Atomic and Solid State Physics, 1977, 64, 205-207.	0.9	4

#	Article	IF	CITATIONS
163	Formation and Decay of Capillary Turbulence on the Charged Surface of Liquid Hydrogen. Journal of Low Temperature Physics, 2005, 139, 523-530.	0.6	4
164	Turbulence of Second Sound Waves in Superfluid 4He: Effect of Low-Frequency Resonant Perturbations. Journal of Low Temperature Physics, 2008, 150, 394-401.	0.6	4
165	MULTIRESONANCE AND ENHANCED SYNCHRONIZATION IN STOCHASTICALLY COUPLED RATCHETS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250141.	0.7	4
166	Plastic Properties of Solid 4He Probed by a Moving Wire: Viscoelastic and Stochastic Behavior Under High Stress. Journal of Low Temperature Physics, 2014, 175, 147-153.	0.6	4
167	Coulomb blockade oscillations in biological ion channels. , 2015, , .		4
168	The Role of Noise in Determining Selective Ionic Conduction Through Nano-Pores. , 2018, , .		4
169	Mechanism of resonant enhancement of electron drift in nanometer semiconductor superlattices subjected to electric and inclined magnetic fields. Physical Review B, 2019, 100, .	1.1	4
170	Origin and control of ionic hydration patterns in nanopores. Communications Materials, 2021, 2, .	2.9	4
171	Magnetism of layered helium-3. Nature, 1989, 340, 98-99.	13.7	3
172	Zero-Dispersion Stochastic Resonance in Underdamped SQUIDS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1998, 08, 843-848.	0.7	3
173	Brownian dynamics simulations of ionic current through an open channel. AIP Conference Proceedings, 2005, , .	0.3	3
174	INFERENCE OF SYSTEMS WITH DELAY AND APPLICATIONS TO CARDIOVASCULAR DYNAMICS. Stochastics and Dynamics, 2005, 05, 321-331.	0.6	3
175	Nonlinear Second Sound Waves and Acoustic Turbulence in Superfluid 4He. Journal of Low Temperature Physics, 2007, 148, 251-255.	0.6	3
176	Dynamical inference of hidden biological populations. European Physical Journal B, 2008, 65, 369-377.	0.6	3
177	Observation of acoustic turbulence in a system of nonlinear second sound waves in superfluid He4. Low Temperature Physics, 2008, 34, 288-292.	0.2	3
178	Second-sound acoustic turbulence in superfluid helium: Decay of the direct and inverse energy cascades. Physical Review B, 2012, 86, .	1.1	3
179	Neutron reflection from the surface of a liquid ⁴ He- ³ He mixture. Journal of Physics: Conference Series, 2012, 400, 012033.	0.3	3
180	Resonant multi-ion conduction in a simple model of calcium channels. , 2013, , .		3

#	Article	IF	CITATIONS
181	Stochastic dynamics of remote knock-on permeation in biological ion channels. , 2013, , .		3
182	Effect of local binding on stochastic transport in ion channels. , 2017, , .		3
183	Application of a Statistical and Linear Response Theory to Multi-Ion Na+ Conduction in NaChBac. Entropy, 2021, 23, 249.	1.1	3
184	Physics of Selective Conduction and Point Mutation in Biological Ion Channels. Physical Review Letters, 2021, 126, 218102.	2.9	3
185	Field-Dependent Dehydration and Optimal Ionic Escape Paths for C ₂ N Membranes. Journal of Physical Chemistry B, 2021, 125, 7044-7059.	1.2	3
186	Will detente kill millikelvin research?. Nature, 1978, 276, 117-117.	13.7	2
187	Effect of external fluctuations on the Fr�edericksz transition in an analogue simulator. Journal of Statistical Physics, 1989, 54, 1383-1396.	0.5	2
188	Analogue simulation of quantum mechanical systems. Journal of Statistical Physics, 1989, 54, 1397-1410.	0.5	2
189	Humpty Dumpty to Moslem art. Nature, 1989, 339, 257-258.	13.7	2
190	Experimental studies of the non-adiabatic escape problem. AIP Conference Proceedings, 2000, , .	0.3	2
191	INTERACTIONS AND SYNCHRONIZATION IN THE CARDIOVASCULAR SYSTEM. Fluctuation and Noise Letters, 2003, 03, L167-L176.	1.0	2
192	Ionic current through an open channel: a low-dimensional model of coupling with vibrations of the wall. , 2004, , .		2
193	Neutron reflection from the surfaces of liquid ⁴ He and a Dilute ³ He— ⁴ He solution. Journal of Physics: Conference Series, 2009, 150, 032022.	0.3	2
194	THE KURAMOTO MODEL SUBJECT TO A FLUCTUATING ENVIRONMENT: APPLICATION TO BRAINWAVE DYNAMICS. Fluctuation and Noise Letters, 2012, 11, 1240011.	1.0	2
195	Dynamics of ions in the selectivity filter of the KcsA channel. European Physical Journal: Special Topics, 2013, 222, 2595-2605.	1.2	2
196	Cardiorespiratory coupling functions, synchronization and ageing. , 2014, , .		2
197	Maximum amplitude of limit cycles in Liénard systems. Physical Review E, 2015, 91, 012927.	0.8	2
198	Diffusion phenomena in a mixed phase space. Chaos, 2020, 30, 013108.	1.0	2

#	Article	IF	CITATIONS
199	Multi-Scale Modelling of the Bound Metal Deposition Manufacturing of Ti6Al4V. Thermo, 2022, 2, 116-148.	0.6	2
200	Rotons put physics in a whirl. Nature, 1990, 347, 233-234.	13.7	1
201	Slowly unwinding in 3He. Nature, 1992, 356, 749-750.	13.7	1
202	Vortex creation in the expansion of He-II from just below the lambda transition. European Physical Journal D, 1996, 46, 43-44.	0.4	1
203	Vortex generation in Hell below 100 mK. European Physical Journal D, 1996, 46, 45-46.	0.4	1
204	Fluctuational Escape and Related Phenomena in Nonlinear Optical Systems. , 0, , 469-524.		1
205	Decay of the Turbulent Cascade of Capillary Waves on the Charged Surface of Liquid Hyrdrogen. Journal of Low Temperature Physics, 2005, 138, 519-524.	0.6	1
206	Questions Related to the Oscillatory Flow of He II through a Grid at Low Temperatures. Journal of Low Temperature Physics, 2005, 138, 543-548.	0.6	1
207	Vibrating Grid as a Tool for Studying the Flow of Pure He II and its Transition to Turbulence. AIP Conference Proceedings, 2006, , .	0.3	1
208	Effect of charge fluctuations on the permeation of ions through biological ion channels. AIP Conference Proceedings, 2007, , .	0.3	1
209	Wave Turbulence in Superfluid [sup 4]He: Energy Cascades & Rogue Waves in the Laboratory. , 2008, , .		1
210	â€~The Josephson effects' (1969) by B.W. Petley. Contemporary Physics, 2009, 50, 69-69.	0.8	1
211	What is life?. Contemporary Physics, 2012, 53, 433-435.	0.8	1
212	Influence of the liquid helium meniscus on neutron reflectometry data. Low Temperature Physics, 2016, 42, 152-155.	0.2	1
213	Introduction to the Physics of Ionic Conduction in Narrow Biological and Artificial Channels. Entropy, 2021, 23, 644.	1.1	1
214	COHERENCE BETWEEN FLUCTUATIONS IN BLOOD FLOW AND OXYGEN SATURATION. , 2022, , 345-356.		1
215	ITÔ VERSUS STRATONOVICH: 30 YEARS LATER. , 2022, , 9-18.		1
216	Normal fluid density of superfluid 3He-B. Nature, 1979, 281, 179-180.	13.7	0

#	Article	IF	CITATIONS
217	Low-temperature physics: Do cosmic rays account for superfluid 3He transition?. Nature, 1984, 312, 595-596.	13.7	0
218	High-pressure physics: Doubly-shocked helium. Nature, 1985, 313, 181-181.	13.7	0
219	Institute of physics low temperature conference London, UK, 13 May 1986. Cryogenics, 1986, 26, 569.	0.9	0
220	Superfluidity of 3He films. Nature, 1988, 332, 307-307.	13.7	0
221	Noise-enhanced heterodyning. AIP Conference Proceedings, 1993, , .	0.3	0
222	Fluctuational transitions and critical phenomena in a periodically driven nonlinear oscillator subject to weak noise. AIP Conference Proceedings, 1993, , .	0.3	0
223	Experiments on the Kibble mechanism in liquid4He. European Physical Journal D, 1996, 46, 35-36.	0.4	0
224	Stochastic signal enhancement in SQUIDs. European Physical Journal D, 1996, 46, 2827-2828.	0.4	0
225	Nonlinear dynamics of large fluctuations. , 1997, , .		0
226	The Kramers problem: Beyond quasi-stationarity. AIP Conference Proceedings, 2000, , .	0.3	0
227	A phase transition in a system driven by coloured noise. AIP Conference Proceedings, 2000, , .	0.3	0
228	Noise induced escape from different types of chaotic attractor. AIP Conference Proceedings, 2000, , .	0.3	0
229	The Role of noise in forming the dynamics of a quasiperiodic system. AIP Conference Proceedings, 2000, , .	0.3	0
230	Activated escape of driven systems. AIP Conference Proceedings, 2000, , .	0.3	0
231	Delayed thermal relaxation of superfluid at mK temperatures. Physica B: Condensed Matter, 2003, 329-333, 218-219.	1.3	0
232	Singularities in Far-from-Equilibrium Distributions at Finite Noise Intensities. AIP Conference Proceedings, 2003, , .	0.3	0
233	DYNAMICS IMPORTANCE SAMPLING FOR THE COLLECTION OF SWITCHING EVENTS IN VERTICAL-CAVITY SURFACE-EMITTING LASERS. Fluctuation and Noise Letters, 2004, 04, L635-L641.	1.0	0
234	Stochastic Dynamics of Anæsthesia. AIP Conference Proceedings, 2005, , .	0.3	0

#	Article	IF	CITATIONS
235	Quantum Turbulence at Very Low Temperatures: Status and Prospects. AIP Conference Proceedings, 2006, , .	0.3	0
236	Decay of Capillary Turbulence on the Surface of a Semiquantum Liquid. AIP Conference Proceedings, 2006, , .	0.3	0
237	Charge Fluctuations and Boundary Conditions of Biological Ion Channels: Effect on the Ionic Transition Rate. , 2009, , .		0
238	Applications of dynamical inference to the analysis of noisy biological time series with hidden dynamical variables. , 2009, , .		0
239	Revolutions that made the Earth. Contemporary Physics, 2011, 52, 591-593.	0.8	0
240	NONLINEAR SECOND SOUND WAVES IN SUPERFLUID HELIUM: INSTABILITIES, TURBULENCE AND ROGUE WAVES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250242.	0.7	0
241	The transition to turbulence in slowly diverging subsonic submerged jets. Physics of Fluids, 2012, 24, 035104.	1.6	0
242	Noise robustness of communications provided by coupling-function-encryption and dynamical Bayesian inference. , 2017, , .		0
243	Kinetic model of selectivity and conductivity of the KcsA filter. , 2017, , .		0
244	A review of Handbook of Ion Channels, by Jie Zheng and Matthew C. Trudeau. Contemporary Physics, 2018, 59, 305-307.	0.8	0
245	Unsolved Problems of Noise Preface to the UPoN-2018 Special Issue of Fluctuation and Noise Letters. Fluctuation and Noise Letters, 2019, 18, 1902001.	1.0	0
246	Phase Coherence Between Cardiovascular Oscillations in Malaria: The Basis for a Possible Diagnostic Test. Understanding Complex Systems, 2021, , 401-419.	0.3	0
247	Stochastic nonlinear dynamics of the cardiovascular system. WIT Transactions on Biomedicine and Health, 2003, , .	0.0	0
248	NONEQUILIBRIUM RATE THEORY FOR CONDUCTION IN OPEN ION CHANNELS. , 2022, , 255-264.		0
249	A NEW APPROACH TO THE TREATMENT OF SEPARATRIX CHAOS. , 2022, , 213-224.		Ο