Nicola Cufaro Petroni

List of Publications by Year
in descending order

60 papers	802 citations	516710 16 h-index	552781 26 g-index
61 all docs	61 docs citations	61 times ranked	215 citing authors

#	Article	IF	Citations
1	Fast simulation of tempered stable Ornstein–Uhlenbeck processes. Computational Statistics, 2022, 37, 2517-2551.	1.5	5
2	Gamma-related Ornstein–Uhlenbeck processes and their simulation*. Journal of Statistical Computation and Simulation, 2021, 91, 1108-1133.	1.2	10
3	Fast Pricing of Energy Derivatives with Mean-Reverting Jump-diffusion Processes. Applied Mathematical Finance, 2021, 28, 1-22.	1.2	9
4	Pricing exchange options with correlated jump diffusion processes. Quantitative Finance, 2020, 20, 1811-1823.	1.7	12
5	Logistic and θ-logistic models in population dynamics: general analysis and exact results. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 445005.	2.1	5
6	Coupling Poisson Processes by Self-Decomposability. Mediterranean Journal of Mathematics, 2017, 14, 1.	0.8	4
7	Entropy and Its Discontents: A Note on Definitions. Entropy, 2014, 16, 4044-4059.	2.2	4
8	Pricing and Hedging Asian Basket Options with Quasi-Monte Carlo Simulations. Methodology and Computing in Applied Probability, 2013, 15, 147-163.	1.2	6
9	Multidimensional quasi-Monte Carlo Malliavin Greeks. Decisions in Economics and Finance, 2013, 36, 199-224.	1.8	3
10	MASS SPECTRUM FROM STOCHASTIC LÉVY-SCHRÖDINGER RELATIVISTIC EQUATIONS: POSSIBLE QUALITATIVE PREDICTIONS IN QCD. Modern Physics Letters A, 2012, 27, 1250034.	1.2	0
11	Markov processes and generalized Schrödinger equations. Journal of Mathematical Physics, 2011, 52, 113509.	1.1	4
12	Lévy–Schrödinger wave packets. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 165305.	2.1	5
13	Lévy processes and Schrödinger equation. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 824-836.	2.6	38
14	Selfdecomposability and selfsimilarity: A concise primer. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 1875-1894.	2.6	16
15	Mixtures in nonstable Lévy processes. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 2227-2250.	2.1	15
16	Lévy–Student processes for a stochastic model of beam halos. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 561, 237-243.	1.6	7
17	Lévy-Student distributions for halos in accelerator beams. Physical Review E, 2005, 72, 066502.	2.1	7
18	DYNAMICAL CONTROL OF THE HALO IN PARTICLE BEAMS: A STOCHASTIC–HYDRODYNAMIC APPROACH. International Journal of Modern Physics B, 2004, 18, 607-616.	2.0	3

#	Article	IF	Citations
19	Stochastic-hydrodynamic model of halo formation in charged particle beams. Physical Review Special Topics: Accelerators and Beams, 2003, 6, .	1.8	11
20	Remarks on Observed Superluminal Light Propagation. Foundations of Physics Letters, 2001, 14, 395-400.	0.6	3
21	Entangled states in stochastic mechanics. Journal of Physics A, 2000, 33, 5833-5848.	1.6	13
22	Stochastic collective dynamics of charged-particle beams in the stability regime. Physical Review E, 2000, 63, 016501.	2.1	16
23	Controlled quantum evolutions and transitions. Journal of Physics A, 1999, 32, 7489-7508.	1.6	10
24	The EXPLODET project: advanced nuclear techniques for humanitarian demining. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 422, 918-921.	1.6	32
25	Exact solutions of Fokker-Planck equations associated to quantum wave functions. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 245, 1-10.	2.1	24
26	Quantum mechanical states as attractors for Nelson processes. Foundations of Physics, 1995, 25, 297-315.	1.3	14
27	Asymptotic Behaviour of Densities for Nelson Processes. , 1995, , 43-51.		0
28	Detection of pitch in random acoustic signals by neural networks. Journal of New Music Research, 1994, 23, 369-399.	0.8	1
29	Single-particle trajectories and interferences in quantum mechanics. Foundations of Physics, 1992, 22, 1-40.	1.3	18
30	On the structure of the quantum-mechanical probability models. Foundations of Physics, 1992, 22, 1379-1401.	1.3	0
31	Conditioning in quantum mechanics. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 160, 107-115.	2.1	7
32	Stochastic mechanics and quantum interference. Physics Letters, Section A: General, Atomic and Solid State Physics, 1989, 141, 370-376.	2.1	13
33	Second-order wave equation for spin-1/2 fields: 8-Spinors and canonical formulation. Foundations of Physics, 1988, 18, 1057-1075.	1.3	1
34	Einstein-Podolsky-Rosen constraints on quantum action at a distance: The Sutherland paradox. Foundations of Physics, 1987, 17, 759-773.	1.3	8
35	Classical analogs for quantum systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 124, 475-479.	2.1	0
36	Toward a Causal Interpretation of the Relativistic Quantum Mechanics of a Spinning Particle. NATO ASI Series Series B: Physics, 1987, , 99-104.	0.2	0

#	Article	IF	Citations
37	A review of extended probabilities. Physics Reports, 1986, 133, 337-401.	25.6	120
38	Second-order wave equation for spin-1/2fields. II. The Hilbert space of the states. Physical Review D, 1986, 33, 1674-1680.	4.7	5
39	Causal space-time paths of individual distinguishable particle motions inN-body quantum systems: Elimination of negative probabilities. Lettere Al Nuovo Cimento Rivista Internazionale Della Società Italiana Di Fisica, 1985, 42, 285-294.	0.4	8
40	An alternative derivation of the spin-dependent quantum potential. Lettere Al Nuovo Cimento Rivista Internazionale Della Società Italiana Di Fisica, 1985, 42, 362-364.	0.4	2
41	Realistic physical origin of the quantum observable operator algebra in the frame of the causal stochastic interpretation of quantum mechanics: The relativistic spin-zero case. Physical Review D, 1985, 32, 1375-1383.	4.7	32
42	Second-order wave equation for spin-(1/2) fields. Physical Review D, 1985, 31, 3157-3161.	4.7	12
43	Form of a spin-dependent quantum potential. Physical Review D, 1984, 30, 495-497.	4.7	11
44	Causal stochastic interpretation of Fermi–Dirac statistics in terms of distinguishable non-locally correlated particles. Physics Letters, Section A: General, Atomic and Solid State Physics, 1984, 101, 4-6.	2.1	31
45	Elimination of negative probabilities within the causal stochastic interpretation of quantum mechanics. Physics Letters, Section A: General, Atomic and Solid State Physics, 1984, 106, 368-370.	2.1	23
46	A causal stochastic theory of spin-1/2 fields. Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods, 1984, 81, 243-259.	0.2	17
47	Random motions at the velocity of light and relativistic quantum mechanics. Journal of Physics A, 1984, 17, 599-608.	1.6	8
48	Dirac's aether in relativistic quantum mechanics. Foundations of Physics, 1983, 13, 253-286.	1.3	49
49	Causal action-at-a-distance interpretation of the aspect-Rapisarda experiments. Physics Letters, Section A: General, Atomic and Solid State Physics, 1983, 93, 383-387.	2.1	17
50	Stochastic model for the motion of correlated photon pairs. Physics Letters, Section A: General, Atomic and Solid State Physics, 1982, 88, 272-274.	2.1	9
51	Stochastic derivation of the Dirac equation in terms of a fluid of spinning tops endowed with random fluctuations at the velocity of light. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 81, 12-14.	2.1	17
52	Action-at-a-distance and causality in the stochastic interpretation of quantum mechanics. Lettere Al Nuovo Cimento Rivista Internazionale Della Società Italiana Di Fisica, 1981, 31, 415-420.	0.4	34
53	Stable states of a relativistic bilocal stochastic oscillator: a new quark-lepton model. Journal of Physics A, 1981, 14, 501-508.	1.6	3
54	Baryon octet magnetic moments in an integer-charged-quark oscillator model. Lettere Al Nuovo Cimento Rivista Internazionale Della Società Italiana Di Fisica, 1980, 29, 565-571.	0.4	1

#	Article	IF	Citations
55	Stochastic derivation of Proca's equation in terms of a fluid of Weyssenhoff tops endowed with random fluctuations at the velocity of light. Physics Letters, Section A: General, Atomic and Solid State Physics, 1979, 73, 289-291.	2.1	22
56	Markov process at the velocity of light: The Klein-Gordon statistic. International Journal of Theoretical Physics, 1979, 18, 807-818.	1.2	11
57	On two conflicting physical interpretations of the breaking of restricted relativistic einsteinian causality by quantum mechanics. Lettere Al Nuovo Cimento Rivista Internazionale Della SocietÃ Italiana Di Fisica, 1979, 25, 151-156.	0.4	13
58	Causal superluminal interpretation of the Einstein-Podolsky-Rosen paradox. Lettere Al Nuovo Cimento Rivista Internazionale Della SocietÃ Italiana Di Fisica, 1979, 26, 149-154.	0.4	23
59	On the observable differences between proper and improper mixtures.â€"II. Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods, 1977, 40, 381-397.	0.2	2
60	On the observable differences between proper and improper mixtures.â€"I. Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods, 1977, 40, 235-241.	0.2	8