

Nicola Cufaro Petroni

List of Publications by Year in descending order

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60
papers

802
citations

516710

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552781

26
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61
all docs

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docs citations

61
times ranked

215
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of extended probabilities. <i>Physics Reports</i> , 1986, 133, 337-401.	25.6	120
2	Dirac's aether in relativistic quantum mechanics. <i>Foundations of Physics</i> , 1983, 13, 253-286.	1.3	49
3	LÃ©vy processes and SchrÃ¶dinger equation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2009, 388, 824-836.	2.6	38
4	Action-at-a-distance and causality in the stochastic interpretation of quantum mechanics. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della SocietÃ Italiana Di Fisica</i> , 1981, 31, 415-420.	0.4	34
5	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. <i>Physical Review D</i> , 1985, 32, 1375-1383.	4.7	32
6	The EXPLODET project: advanced nuclear techniques for humanitarian demining. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1999, 422, 918-921.	1.6	32
7	Causal stochastic interpretation of FermiÃ© Dirac statistics in terms of distinguishable non-locally correlated particles. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1984, 101, 4-6.	2.1	31
8	Exact solutions of Fokker-Planck equations associated to quantum wave functions. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1998, 245, 1-10.	2.1	24
9	Causal superluminal interpretation of the Einstein-Podolsky-Rosen paradox. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della SocietÃ Italiana Di Fisica</i> , 1979, 26, 149-154.	0.4	23
10	Elimination of negative probabilities within the causal stochastic interpretation of quantum mechanics. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1984, 106, 368-370.	2.1	23
11	Stochastic derivation of Proca's equation in terms of a fluid of Weyssenhoff tops endowed with random fluctuations at the velocity of light. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1979, 73, 289-291.	2.1	22
12	Single-particle trajectories and interferences in quantum mechanics. <i>Foundations of Physics</i> , 1992, 22, 1-40.	1.3	18
13	Stochastic derivation of the Dirac equation in terms of a fluid of spinning tops endowed with random fluctuations at the velocity of light. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1981, 81, 12-14.	2.1	17
14	Causal action-at-a-distance interpretation of the aspect-Rapisarda experiments. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1983, 93, 383-387.	2.1	17
15	A causal stochastic theory of spin-1/2 fields. <i>Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods</i> , 1984, 81, 243-259.	0.2	17
16	Stochastic collective dynamics of charged-particle beams in the stability regime. <i>Physical Review E</i> , 2000, 63, 016501.	2.1	16
17	Selfdecomposability and selfsimilarity: A concise primer. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2008, 387, 1875-1894.	2.6	16
18	Mixtures in nonstable LÃ©vy processes. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2007, 40, 2227-2250.	2.1	15

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19	Quantum mechanical states as attractors for Nelson processes. Foundations of Physics, 1995, 25, 297-315.	1.3	14
20	On two conflicting physical interpretations of the breaking of restricted relativistic einsteinian causality by quantum mechanics. Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica, 1979, 25, 151-156.	0.4	13
21	Stochastic mechanics and quantum interference. Physics Letters, Section A: General, Atomic and Solid State Physics, 1989, 141, 370-376.	2.1	13
22	Entangled states in stochastic mechanics. Journal of Physics A, 2000, 33, 5833-5848.	1.6	13
23	Second-order wave equation for spin-(1/2) fields. Physical Review D, 1985, 31, 3157-3161.	4.7	12
24	Pricing exchange options with correlated jump diffusion processes. Quantitative Finance, 2020, 20, 1811-1823.	1.7	12
25	Markov process at the velocity of light: The Klein-Gordon statistic. International Journal of Theoretical Physics, 1979, 18, 807-818.	1.2	11
26	Form of a spin-dependent quantum potential. Physical Review D, 1984, 30, 495-497.	4.7	11
27	Stochastic-hydrodynamic model of halo formation in charged particle beams. Physical Review Special Topics: Accelerators and Beams, 2003, 6, .	1.8	11
28	Controlled quantum evolutions and transitions. Journal of Physics A, 1999, 32, 7489-7508.	1.6	10
29	Gamma-related Ornstein-Uhlenbeck processes and their simulation*. Journal of Statistical Computation and Simulation, 2021, 91, 1108-1133.	1.2	10
30	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
31	Fast Pricing of Energy Derivatives with Mean-Reverting Jump-diffusion Processes. Applied Mathematical Finance, 2021, 28, 1-22.	1.2	9
32	On the observable differences between proper and improper mixtures. I. Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods, 1977, 40, 235-241.	0.2	8
33	Random motions at the velocity of light and relativistic quantum mechanics. Journal of Physics A, 1984, 17, 599-608.	1.6	8
34	Causal space-time paths of individual distinguishable particle motions in N-body quantum systems: Elimination of negative probabilities. Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica, 1985, 42, 285-294.	0.4	8
35	Einstein-Podolsky-Rosen constraints on quantum action at a distance: The Sutherland paradox. Foundations of Physics, 1987, 17, 759-773.	1.3	8
36	Conditioning in quantum mechanics. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 160, 107-115.	2.1	7

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37	LÃ©vy-Student distributions for halos in accelerator beams. <i>Physical Review E</i> , 2005, 72, 066502.	2.1	7
38	LÃ©vy-Student processes for a stochastic model of beam halos. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2006, 561, 237-243.	1.6	7
39	Pricing and Hedging Asian Basket Options with Quasi-Monte Carlo Simulations. <i>Methodology and Computing in Applied Probability</i> , 2013, 15, 147-163.	1.2	6
40	Second-order wave equation for spin-1/2 fields. II. The Hilbert space of the states. <i>Physical Review D</i> , 1986, 33, 1674-1680.	4.7	5
41	LÃ©vy-SchrÃ¶dinger wave packets. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2011, 44, 165305.	2.1	5
42	Logistic and $\hat{\imath}$ -logistic models in population dynamics: general analysis and exact results. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2020, 53, 445005.	2.1	5
43	Fast simulation of tempered stable Ornstein-Uhlenbeck processes. <i>Computational Statistics</i> , 2022, 37, 2517-2551.	1.5	5
44	Markov processes and generalized SchrÃ¶dinger equations. <i>Journal of Mathematical Physics</i> , 2011, 52, 113509.	1.1	4
45	Entropy and Its Discontents: A Note on Definitions. <i>Entropy</i> , 2014, 16, 4044-4059.	2.2	4
46	Coupling Poisson Processes by Self-Decomposability. <i>Mediterranean Journal of Mathematics</i> , 2017, 14, 1.	0.8	4
47	Stable states of a relativistic bilocal stochastic oscillator: a new quark-lepton model. <i>Journal of Physics A</i> , 1981, 14, 501-508.	1.6	3
48	Remarks on Observed Superluminal Light Propagation. <i>Foundations of Physics Letters</i> , 2001, 14, 395-400.	0.6	3
49	DYNAMICAL CONTROL OF THE HALO IN PARTICLE BEAMS: A STOCHASTIC-HYDRODYNAMIC APPROACH. <i>International Journal of Modern Physics B</i> , 2004, 18, 607-616.	2.0	3
50	Multidimensional quasi-Monte Carlo Malliavin Greeks. <i>Decisions in Economics and Finance</i> , 2013, 36, 199-224.	1.8	3
51	On the observable differences between proper and improper mixtures. II. <i>Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods</i> , 1977, 40, 381-397.	0.2	2
52	An alternative derivation of the spin-dependent quantum potential. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della SocietÃ Italiana Di Fisica</i> , 1985, 42, 362-364.	0.4	2
53	Baryon octet magnetic moments in an integer-charged-quark oscillator model. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della SocietÃ Italiana Di Fisica</i> , 1980, 29, 565-571.	0.4	1
54	Second-order wave equation for spin-1/2 fields: 8-Spinors and canonical formulation. <i>Foundations of Physics</i> , 1988, 18, 1057-1075.	1.3	1

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55	Detection of pitch in random acoustic signals by neural networks. Journal of New Music Research, 1994, 23, 369-399.	0.8	1
56	Classical analogs for quantum systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 124, 475-479.	2.1	0
57	On the structure of the quantum-mechanical probability models. Foundations of Physics, 1992, 22, 1379-1401.	1.3	0
58	MASS SPECTRUM FROM STOCHASTIC L%VY-SCHR-DINGER RELATIVISTIC EQUATIONS: POSSIBLE QUALITATIVE PREDICTIONS IN QCD. Modern Physics Letters A, 2012, 27, 1250034.	1.2	0
59	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
60	Asymptotic Behaviour of Densities for Nelson Processes. , 1995, , 43-51.		0