Enrico Scalas

List of Publications by Year
in descending order

84 papers	4,652 citations	257450 24 h-index	102487 66 g-index
90 all docs	90 docs citations	90 times ranked	2374 citing authors

#	Article	IF	Citations
1	Fractional calculus and continuous-time finance. Physica A: Statistical Mechanics and Its Applications, 2000, 284, 376-384.	2.6	679
2	Fractional calculus and continuous-time finance II: the waiting-time distribution. Physica A: Statistical Mechanics and Its Applications, 2000, 287, 468-481.	2.6	450
3	Waiting-times and returns in high-frequency financial data: an empirical study. Physica A: Statistical Mechanics and Its Applications, 2002, 314, 749-755.	2.6	410
4	The application of continuous-time random walks in finance and economics. Physica A: Statistical Mechanics and Its Applications, 2006, 362, 225-239.	2.6	228
5	Uncoupled continuous-time random walks: Solution and limiting behavior of the master equation. Physical Review E, 2004, 69, 011107.	2.1	180
6	Coupled continuous time random walks in finance. Physica A: Statistical Mechanics and Its Applications, 2006, 370, 114-118.	2.6	169
7	Monte Carlo simulation of uncoupled continuous-time random walks yielding a stochastic solution of the space-time fractional diffusion equation. Physical Review E, 2008, 77, 021122.	2.1	150
8	Fractional Calculus and Continuous-Time Finance III : the Diffusion Limit. , 2001, , 171-180.		134
9	Relating Lattice and Domain Structures of Monoglyceride Monolayers. The Journal of Physical Chemistry, 1995, 99, 8758-8762.	2.9	80
10	Anomalous waiting times in high-frequency financial data. Quantitative Finance, 2004, 4, 695-702.	1.7	75
11	Stochastic calculus for uncoupled continuous-time random walks. Physical Review E, 2009, 79, 066102.	2.1	66
12	Fitting the empirical distribution of intertrade durations. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 2025-2034.	2.6	64
13	Waiting times between orders and trades in double-auction markets. Physica A: Statistical Mechanics and Its Applications, 2006, 366, 463-471.	2.6	59
14	Full characterization of the fractional Poisson process. Europhysics Letters, 2011, 96, 20004.	2.0	50
15	REVISITING THE DERIVATION OF THE FRACTIONAL DIFFUSION EQUATION. Fractals, 2003, 11, 281-289.	3.7	47
16	The dependence of the anomalous J/Î^ suppression on the number of participant nucleons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 521, 195-203.	4.1	42
17	Statistical equilibrium in simple exchange games I. European Physical Journal B, 2006, 53, 267-272.	1.5	39
18	Five Years of Continuous-time Random Walks in Econophysics. , 2006, , 3-16.		34

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19	Statistical equilibrium in simple exchange games II. The redistribution game. European Physical Journal B, 2007, 60, 241-246.	1.5	34
20	Collective surface diffusion on triangular and square interacting lattice gases. Surface Science, 1998, 409, 117-129.	1.9	29
21	The distribution of first-passage times and durations in FOREX and future markets. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 2839-2853.	2.6	29
22	Projection-operator route to the generalized Darken equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 186, 415-418.	2.1	27
23	The fractional non-homogeneous Poisson process. Statistics and Probability Letters, 2017, 120, 147-156.	0.7	26
24	Transverse momentum distribution of J/Î¨ produced in PbPb and p-A interactions at the CERN SPS. Nuclear Physics A, 2003, 715, 675c-678c.	1.5	25
25	Mixtures of compound Poisson processes as models of tick-by-tick financial data. Chaos, Solitons and Fractals, 2007, 34, 33-40.	5.1	25
26	Fine structure of spectral properties for random correlation matrices: An application to financial markets. Physical Review E, 2011, 84, 016113.	2.1	25
27	A generalization of the space-fractional Poisson process and its connection to some LÃ©vy processes. Electronic Communications in Probability, 2016, 21, .	0.4	22
28	Fat tails in financial return distributions revisited: Evidence from the Korean stock market. Physica A: Statistical Mechanics and Its Applications, 2019, 526, 121055.	2.6	21
29	Statistical Analysis and Agent-Based Microstructure Modeling of High-Frequency Financial Trading. IEEE Journal on Selected Topics in Signal Processing, 2012, 6, 381-387.	10.8	19
30	Solvable non-Markovian dynamic network. Physical Review E, 2015, 92, 042801.	2.1	19
31	The value of information in a multi-agent market model. European Physical Journal B, 2007, 55, 115-120.	1.5	17
32	Performance of information criteria for selection of Hawkes process models of financial data. Quantitative Finance, 2018, 18, 225-235.	1.7	15
33	Collective surface diffusion on a triangular lattice in presence of ordered phases. Surface Science, 1998, 402-404, 281-285.	1.9	14
34	Resolving power and information theory in signal recovery. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1993, 10, 991.	1.5	13
35	Lattice-gas model of diffusion of NH3 on Re(0001). Chemical Physics Letters, 1995, 236, 533-537.	2.6	13
36	Modeling non-stationarities in high-frequency financial time series. Physica A: Statistical Mechanics and Its Applications, 2019, 521, 173-196.	2.6	13

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37	Semi-Markov Graph Dynamics. PLoS ONE, 2011, 6, e23370.	2.5	12
38	Activity spectrum from waiting-time distribution. Physica A: Statistical Mechanics and Its Applications, 2007, 383, 43-48.	2.6	11
39	A random telegraph signal of Mittag-Leffler type. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 3991-3999.	2.6	11
40	Velocity and energy distributions in microcanonical ensembles of hard spheres. Physical Review E, 2015, 92, 022140.	2.1	11
41	Spectral densities of Wishart-LÃ©vy free stable random matrices. European Physical Journal B, 2010, 73, 13-22.	1.5	10
42	Performances of zero degree calorimeters for the ALICE experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 456, 248-258.	1.6	9
43	On the convergence of quadratic variation for compound fractional Poisson processes. Fractional Calculus and Applied Analysis, 2012, 15, .	2.2	9
44	A functional limit theorem for stochastic integrals driven by a time-changed symmetric<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:mi>Î±</mml:mi></mml:math>-stable LÃ©vy process. Stochastic Processes and Their Applications, 2014, 124, 385-410.	0.9	9
45	Limit theorems for the fractional nonhomogeneous Poisson process. Journal of Applied Probability, 2019, 56, 246-264.	0.7	7
46	Growth and allocation of resources in economics: The agent-based approach. Physica A: Statistical Mechanics and Its Applications, 2006, 370, 86-90.	2.6	6
47	ItÃ´ and Stratonovich integrals on compound renewal processes: the normal/Poisson case. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 1583-1588.	3.3	6
48	Random numbers from the tails of probability distributions using the transformation method. Fractional Calculus and Applied Analysis, 2013, 16, 332-353.	2.2	6
49	Lyapunov function computation for autonomous linear stochastic differential equations using sum-of-squares programming. Discrete and Continuous Dynamical Systems - Series B, 2018, 23, 939-956.	0.9	6
50	Uncertainty Quantification for Fat-Tailed Probability Distributions in Aircraft Engine Simulations. Journal of Propulsion and Power, 2017, 33, 881-890.	2.2	5
51	Low-traffic limit and first-passage times for a simple model of the continuous double auction. Physica A: Statistical Mechanics and Its Applications, 2017, 485, 61-72.	2.6	5
52	A Class of CTRWs: Compound Fractional Poisson Processes. , 2011, , 353-374.		5
53	Fraudulent Agents in an Artificial Financial Market. Lecture Notes in Economics and Mathematical Systems, 2005, , 317-326.	0.3	4
54	Ehrenfest urn revisited: Playing the game on a realistic fluid model. Physical Review E, 2007, 76, 011104.	2.1	4

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55	A Dynamic Probabilistic Version of the Aokiâ€“Yoshikawa Sectoral Productivity Model. Economics, 2009, 3, .	0.6	4
56	Ergodic Transition in a Simple Model of the Continuous Double Auction. PLoS ONE, 2014, 9, e88095.	2.5	4
57	Wealth distribution and the Lorenz curve: a finitary approach. Journal of Economic Interaction and Coordination, 2015, 10, 79-89.	0.7	4
58	Limitations of portfolio diversification through fat tails of the return Distributions: Some empirical evidence. North American Journal of Economics and Finance, 2021, 56, 101358.	3.5	4
59	Head-group variations and monolayer structures of diol derivatives. , 1996, , 351-355.		3
60	A RENEWAL PROCESS OF MITTAG-LEFFLER TYPE. , 2004, , .		3
61	FRACTIONAL CALCULUS AND THE SCHRÃ–DINGER EQUATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 234-237.	0.4	3
62	Computation of the stochastic basin of attraction by rigorous construction of a Lyapunov function. Discrete and Continuous Dynamical Systems - Series B, 2019, 24, 4247-4269.	0.9	3
63	Limit theorems for prices of options written on semi-Markov processes. Theory of Probability and Mathematical Statistics, 2021, 105, 3-33.	0.5	3
64	Multi-site correlation functions in two-dimensional lattice gases. Physica A: Statistical Mechanics and Its Applications, 1996, 223, 149-166.	2.6	2
65	Poisson-process generalization for the trading waiting-time distribution in a double-auction mechanism. , 2005, 5848, 215.		2
66	Fractional non-homogeneous Poisson and PÃ³lya-Aeppli processes of order k and beyond. Communications in Statistics - Theory and Methods, 2023, 52, 2682-2701.	1.0	2
67	The Mathematics of Human Contact: Developing a Model for Social Interaction in School Children. Acta Physica Polonica A, 2018, 133, 1421-1432.	0.5	2
68	Bounds for mixing times for finite semi-Markov processes with heavy-tail jump distribution. Fractional Calculus and Applied Analysis, 2022, 25, 229-243.	2.2	2
69	Continuum and thermodynamic limits for a simple random-exchange model. Stochastic Processes and Their Applications, 2022, , .	0.9	2
70	PION INDUCED REACTIONS ON ⁴He IN THE Î” RESONANCE ENERGY REGION. International Journal of Modern Physics A, 2011, 26, 705-707.	1.5	1
71	A spectral perspective on excess volatility. Applied Economics Letters, 2015, 22, 745-750.	1.8	1
72	A fractional generalization of the dirichlet distribution and related distributions. Fractional Calculus and Applied Analysis, 2021, 24, 112-136.	2.2	1

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73	A stylized model for the continuous double auction. Lecture Notes in Economics and Mathematical Systems, 2012, , 115-125.	0.3	1
74	A Parsimonious Model for Intraday European Option Pricing. SSRN Electronic Journal, 0, , .	0.4	1
75	Erratum to â€œCollective diffusion in a lattice gas: application to O/W(110)â€•[Surface Science 307â€“309 (1994) 565]. Surface Science, 1994, 318, 443.	1.9	0
76	The 2006 edition of the Econophysics Colloquium and the Bonzenfreies Colloquium. Physica A: Statistical Mechanics and Its Applications, 2007, 383, xi-xii.	2.6	0
77	Simulation informatisÃ©e en humanitÃ©s et sciences sociales. Nouvelles Perspectives En Sciences Sociales, 2010, 5, 59-67.	0.1	0
78	Pion induced reactions on⁴He in the Î” resonance energy region. Journal of Physics: Conference Series, 2011, 312, 022014.	0.4	0
79	Emerging properties of financial time series in the â€œGame of Lifeâ€• Physical Review E, 2011, 84, 066104.	2.1	0
80	Random exchange models and the distribution of wealth. European Physical Journal: Special Topics, 2016, 225, 3293-3298.	2.6	0
81	Continuous-time statistics and generalized relaxation equations. European Physical Journal B, 2017, 90, 1.	1.5	0
82	Tolstoyâ€™s dream and the quest for statistical equilibrium in economics and the social sciences. , 2010, , 115-133.		0
83	Continuum and Thermodynamic Limits for a Wealth-Distribution Model. Evolutionary Economics and Social Complexity Science, 2020, , 79-99.	0.7	0
84	An empirical data analysis of â€œprice runsâ€•in daily financial indices: Dynamically assessing market geometric distributional behavior. PLoS ONE, 2022, 17, e0270492.	2.5	0