Gianni Pagnini

List of Publications by Year
in descending order

66 papers	2,152 citations	304368 22 h-index	223531 46 g-index
68 all docs	68 docs citations	68 times ranked	1188 citing authors

#	Article	IF	Citations
1	Discrete random walk models for spaceâ€“time fractional diffusion. Chemical Physics, 2002, 284, 521-541.	0.9	236
2	Time-fractional Diffusion of Distributed Order. JVC/Journal of Vibration and Control, 2008, 14, 1267-1290.	1.5	170
3	Fox <mml:math altimg="si1.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x	1.1	152
4	The Wright functions as solutions of the time-fractional diffusion equation. Applied Mathematics and Computation, 2003, 141, 51-62.	1.4	150
5	Some aspects of fractional diffusion equations of single and distributed order. Applied Mathematics and Computation, 2007, 187, 295-305.	1.4	139
6	Random diffusivity from stochastic equations: comparison of two models for Brownian yet non-Gaussian diffusion. New Journal of Physics, 2018, 20, 043044.	1.2	111
7	The role of the Foxâ€“Wright functions in fractional sub-diffusion of distributed order. Journal of Computational and Applied Mathematics, 2007, 207, 245-257.	1.1	96
8	ErdÃ©lyi-Kober fractional diffusion. Fractional Calculus and Applied Analysis, 2012, 15, 117-127.	1.2	93
9	The -Wright Function in Time-Fractional Diffusion Processes: A Tutorial Survey. International Journal of Differential Equations, 2010, 2010, 1-29.	0.3	81
10	Fractional diffusion: probability distributions and random walk models. Physica A: Statistical Mechanics and Its Applications, 2002, 305, 106-112.	1.2	79
11	Crossover from anomalous to normal diffusion: truncated power-law noise correlations and applications to dynamics in lipid bilayers. New Journal of Physics, 2018, 20, 103027.	1.2	79
12	Characterizations and simulations of a class of stochastic processes to model anomalous diffusion. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 285003.	0.7	65
13	Fractional kinetics emerging from ergodicity breaking in random media. Physical Review E, 2016, 94, 052147.	0.8	47
14	Discretizations of the Spectral Fractional Laplacian on General Domains with Dirichlet, Neumann, and Robin Boundary Conditions. SIAM Journal on Numerical Analysis, 2018, 56, 1243-1272.	1.1	44
15	Fractional Brownian motion in a finite interval: correlations effect depletion or accretion zones of particles near boundaries. New Journal of Physics, 2019, 21, 022002.	1.2	43
16	Fractional relaxation with time-varying coefficient. Fractional Calculus and Applied Analysis, 2014, 17, 424-439.	1.2	41
17	The M-Wright function as a generalization of the Gaussian density for fractional diffusion processes. Fractional Calculus and Applied Analysis, 2013, 16, 436-453.	1.2	39
18	Salvatore Pincherle: the pioneer of the Mellinâ€“Barnes integrals. Journal of Computational and Applied Mathematics, 2003, 153, 331-342.	1.1	35

#	Article	IF	Citations
19	Short note on the emergence of fractional kinetics. Physica A: Statistical Mechanics and Its Applications, 2014, 409, 29-34.	1.2	32
20	Langevin equation in complex media and anomalous diffusion. Journal of the Royal Society Interface, 2018, 15, 20180282.	1.5	31
21	A stochastic solution with Gaussian stationary increments of the symmetric space-time fractional diffusion equation. Fractional Calculus and Applied Analysis, 2016, 19, 408-440.	1.2	25
22	Generalized Cattaneo (telegrapher's) equations in modeling anomalous diffusion phenomena. Physical Review E, 2020, 102, 022128.	0.8	25
23	Evolution equations for the probabilistic generalization of the Voigt profile function. Journal of Computational and Applied Mathematics, 2010, 233, 1590-1595.	1.1	21
24	Exact solutions of triple-order time-fractional differential equations for anomalous relaxation and diffusion I: The accelerating case. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 602-613.	1.2	21
25	Nonlinear time-fractional differential equations in combustion science. Fractional Calculus and Applied Analysis, 2011, 14, 80-93.	1.2	20
26	Turbulence and fire-spotting effects into wild-land fire simulators. Communications in Nonlinear Science and Numerical Simulation, 2016, 39, 300-320.	1.7	18
27	Local Analysis of Heterogeneous Intracellular Transport: Slow and Fast Moving Endosomes. Entropy, 2021, 23, 958.	1.1	18
28	Modelling wildland fire propagation by tracking random fronts. Natural Hazards and Earth System Sciences, 2014, 14, 2249-2263.	1.5	16
29	On the merits of sparse surrogates for global sensitivity analysis of multi-scale nonlinear problems: Application to turbulence and fire-spotting model in wildland fire simulators. Communications in Nonlinear Science and Numerical Simulation, 2019, 73, 120-145.	1.7	16
30	Front propagation in anomalous diffusive media governed by time-fractional diffusion. Journal of Computational Physics, 2015, 293, 427-441.	1.9	14
31	Two-particle anomalous diffusion: probability density functions and self-similar stochastic processes. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20120154.	1.6	13
32	RandomFront 2.3: a physical parameterisation of fire spotting for operational fire spread models â€“ implementation in WRF-SFIRE and response analysis with LSFire+. Geoscientific Model Development, 2019, 12, 69-87.	1.3	13
33	Finite-energy LÃ©vy-type motion through heterogeneous ensemble of Brownian particles. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 095601.	0.7	13
34	Sub-diffusion equations of fractional order and their fundamental solutions. , 2007, , 23-55.		13
35	Lagrangian Formulation of Turbulent Premixed Combustion. Physical Review Letters, 2011, 107, 044503.	2.9	12
36	Centre-of-Mass Like Superposition of Ornsteinâ€“Uhlenbeck Processes: A Pathway to Non-Autonomous Stochastic Differential Equations and to Fractional Diffusion. Fractional Calculus and Applied Analysis, 2018, 21, 1420-1435.	1.2	12

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37	SHould I Stay Or Should I Go? Zero-Size Jumps in Random Walks for LÃ©vy Flights. Fractional Calculus and Applied Analysis, 2021, 24, 137-167.	1.2	12
38	Anomalous diffusion originated by two Markovian hopping-trap mechanisms. Journal of Physics A: Mathematical and Theoretical, 2022, 55, 224012.	0.7	12
39	Lagrangian stochastic models for turbulent relative dispersion based on particle pair rotation. Journal of Fluid Mechanics, 2008, 616, 357-395.	1.4	11
40	Generalized Fractional Master Equation for Self-Similar Stochastic Processes Modelling Anomalous Diffusion. International Journal of Stochastic Analysis, 2012, 2012, 1-14.	0.3	11
41	Mellin Convolution for Subordinated Stable Processes. Journal of Mathematical Sciences, 2006, 132, 637-642.	0.1	9
42	The evolution equation for the radius of a premixed flame ball in fractional diffusive media. European Physical Journal: Special Topics, 2011, 193, 105-117.	1.2	7
43	Historical notes on the M-Wright/Mainardi function. Communications in Applied and Industrial Mathematics, 2014, 6, .	0.6	6
44	Fire-spotting generated fires. Part II: The role of flame geometry and slope. Applied Mathematical Modelling, 2022, 104, 1-20.	2.2	6
45	Gaussian Processes in Complex Media: New Vistas on Anomalous Diffusion. Frontiers in Physics, 2019, 7, .	1.0	5
46	A generalized Stefan model accounting for system memory and non-locality. International Communications in Heat and Mass Transfer, 2020, 114, 104584.	2.9	5
47	FRACTIONAL RELAXATION AND TIME-FRACTIONAL DIFFUSION OF DISTRIBUTED ORDER. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 1-21.	0.4	4
48	Testing kernel density reconstruction for Lagrangian photochemical modelling. Atmospheric Environment, 2006, 40, 7770-7785.	1.9	4
49	Fire-spotting generated fires. Part I: The role of atmospheric stability. Applied Mathematical Modelling, 2020, 84, 590-609.	2.2	4
50	Influence of Eulerian and Lagrangian scales on the relative dispersion properties in Lagrangian stochastic models of turbulence. Physical Review E, 2004, 69, 037301.	0.8	3
51	The kernel method to compute the intensity of segregation for reactive pollutants: Mathematical formulation. Atmospheric Environment, 2009, 43, 3691-3698.	1.9	3
52	Lagrangian properties of turbulent diffusion with passive chemical reaction in the framework of the premixed combustion theory. Physics of Fluids, 2011, 23, 035101.	1.6	3
53	The Role of Salvatore Pincherle in the Development of Fractional Calculus. , 2012, , 373-381.		2
54	Modelling and simulation of wildland fire in the framework of the level set method. Ricerche Di Matematica, 2016, 65, 523-533.	0.6	2

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55	Fire Spotting Effects in Wildland Fire Propagation. SEMA SIMAI Springer Series, 2014, , 203-214.	0.4	2
56	SPACE-TIME FRACTIONAL DIFFUSION: EXACT SOLUTIONS AND PROBABILITY INTERPRETATION. , 2002, , .		2
57	Turbulence Scale Dependence of the Richardson Constant in Lagrangian Stochastic Models. Boundary-Layer Meteorology, 2006, 118, 55-68.	1.2	1
58	Self-similar stochastic models with stationary increments for symmetric space-time fractional diffusion. , 2014, , .		1
59	A short bio of Professor Francesco Mainardi. Communications in Applied and Industrial Mathematics, 2014, 6, .	0.6	1
60	Physical Parametrisation of Fire-Spotting for Operational Wildfire Simulators. SEMA SIMAI Springer Series, 2021, , 21-38.	0.4	1
61	PhyFire: An Online GIS-Integrated Wildfire Spread Simulation Tool Based on a Semiphysical Model. SEMA SIMAI Springer Series, 2021, , 1-20.	0.4	1
62	Corrigendum to "Modelling wildland fire propagation by tracking random fronts" published in Nat. Hazards Earth Syst. Sci., 14, 2249â€“2263, 2014. Natural Hazards and Earth System Sciences, 2014, 14, 2373-2373.	1.5	0
63	Restoring Property of the Michelsonâ€“Sivashinsky Equation. Combustion Science and Technology, 2019, 191, 1734-1741.	1.2	0
64	Fractional Diffusion and Medium Heterogeneity: The Case of the Continuous Time Random Walk. SEMA SIMAI Springer Series, 2021, , 275-286.	0.4	0
65	Lagrangian properties of diffusion in the theory of turbulent combustion. , 2009, , .		0
66	Subordination Formulae for Space-time Fractional Diffusion Processes via Mellin Convolution. International Journal of Mathematical Models and Methods in Applied Sciences, 2022, 16, 71-76.	0.1	0