Ralf Metzler

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/5273825/ralf-metzler-publications-by-year.pdf

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

 370
 27,124
 74
 156

 papers
 citations
 h-index
 g-index

 400
 30,526
 3.6
 7.7

 ext. papers
 ext. citations
 avg, IF
 L-index

#	Paper	IF	Citations
370	Rate equations, spatial moments, and concentration profiles for mobile-immobile models with power-law and mixed waiting time distributions <i>Physical Review E</i> , 2022 , 105, 014105	2.4	Ο
369	Heterogeneous diffusion with stochastic resetting. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2022 , 55, 074003	2	0
368	Nonergodicity of reset geometric Brownian motion <i>Physical Review E</i> , 2022 , 105, L012106	2.4	2
367	Tuning of the Dielectric Relaxation and Complex Susceptibility in a System of Polar Molecules: A Generalised Model Based on Rotational Diffusion with Resetting. <i>Fractal and Fractional</i> , 2022 , 6, 88	3	1
366	Infinite density and relaxation for L\(\textstyre{U} \)y walks in an external potential: Hermite polynomial approach <i>Physical Review E</i> , 2022 , 105, 044118	2.4	
365	Income inequality and mobility in geometric Brownian motion with stochastic resetting: theoretical results and empirical evidence of non-ergodicity <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2022 , 380, 20210157	3	3
364	Asymmetric LNy Flights Are More Efficient in Random Search. Fractal and Fractional, 2022 , 6, 260	3	Ο
363	Adsorption of lysozyme into a charged confining pore. Physical Chemistry Chemical Physics, 2021,	3.6	2
362	Non-Gaussian, transiently anomalous, and ergodic self-diffusion of flexible dumbbells in crowded two-dimensional environments: Coupled translational and rotational motions <i>Physical Review E</i> , 2021 , 104, 064603	2.4	1
361	Objective comparison of methods to decode anomalous diffusion. <i>Nature Communications</i> , 2021 , 12, 6253	17.4	14
3 60	Universal Relation between Instantaneous Diffusivity and Radius of Gyration of Proteins in Aqueous Solution. <i>Physical Review Letters</i> , 2021 , 126, 128101	7.4	22
359	Capturing multifractality of pressure fluctuations in thermoacoustic systems using fractional-order derivatives. <i>Chaos</i> , 2021 , 31, 033108	3.3	1
358	Stochastic resetting by a random amplitude. <i>Physical Review E</i> , 2021 , 103, 052123	2.4	8
357	Reply to: Insufficient evidence for ageing in protein dynamics. <i>Nature Physics</i> , 2021 , 17, 775-776	16.2	2
356	Fractional Brownian motion in superharmonic potentials and non-Boltzmann stationary distributions. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2021 , 54, 29LT01	2	4
355	First-passage problem for stochastic differential equations with combined parametric Gaussian and LDy white noises via path integral method. <i>Journal of Computational Physics</i> , 2021 , 435, 110264	4.1	11
354	Scaled geometric Brownian motion features sub- or superexponential ensemble-averaged, but linear time-averaged mean-squared displacements. <i>Physical Review E</i> , 2021 , 103, 062127	2.4	7

(2020-2021)

353	Exact first-passage time distributions for three random diffusivity models. <i>Journal of Physics A:</i> Mathematical and Theoretical, 2021 , 54, 04LT01	2	4
352	Anomalous diffusion, nonergodicity, and ageing for exponentially and logarithmically time-dependent diffusivity: striking differences for massive versus massless particles. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 195401	3	15
351	Exact distributions of the maximum and range of random diffusivity processes. <i>New Journal of Physics</i> , 2021 , 23, 023014	2.9	3
350	Time averaging and emerging nonergodicity upon resetting of fractional Brownian motion and heterogeneous diffusion processes. <i>Physical Review E</i> , 2021 , 104, 024105	2.4	13
349	Inertia triggers nonergodicity of fractional Brownian motion. <i>Physical Review E</i> , 2021 , 104, 024115	2.4	4
348	Backbone diffusion and first-passage dynamics in a comb structure with confining branches under stochastic resetting. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2021 , 54, 404006	2	2
347	A molecular relay race: sequential first-passage events to the terminal reaction centre in a cascade of diffusion controlled processes. <i>New Journal of Physics</i> , 2021 , 23, 093004	2.9	1
346	Closed-form multi-dimensional solutions and asymptotic behaviors for subdiffusive processes with crossovers: I. Retarding case. <i>Chaos, Solitons and Fractals</i> , 2021 , 152, 111357	9.3	1
345	From continuous-time random walks to the fractional Jeffreys equation: Solution and properties. <i>International Journal of Heat and Mass Transfer</i> , 2021 , 181, 121839	4.9	4
344	Distribution of first-reaction times with target regions on boundaries of shell-like domains. <i>New Journal of Physics</i> , 2021 , 23, 123049	2.9	Ο
343	Generalised Geometric Brownian Motion: Theory and Applications to Option Pricing. <i>Entropy</i> , 2020 , 22,	2.8	14
342	LDy noise-driven escape from arctangent potential wells. <i>Chaos</i> , 2020 , 30, 123103	3.3	6
341	Buckling transitions and soft-phase invasion of two-component icosahedral shells. <i>Physical Review E</i> , 2020 , 102, 062104	2.4	2
340	Preface: new trends in first-passage methods and applications in the life sciences and engineering. Journal of Physics A: Mathematical and Theoretical, 2020 , 53, 190301	2	13
339	Spurious ergodicity breaking in normal and fractional Ornstein Dhlenbeck process. <i>New Journal of Physics</i> , 2020 , 22, 073012	2.9	5
338	Continuous time random walk in a velocity field: role of domain growth, Galilei-invariant advection-diffusion, and kinetics of particle mixing. <i>New Journal of Physics</i> , 2020 , 22, 073048	2.9	5
337	First passage time moments of asymmetric L\(\mathbb{Q}\)y flights. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2020 , 53, 275002	2	9
336	LQy walk dynamics in an external harmonic potential. <i>Physical Review E</i> , 2020 , 101, 062127	2.4	10

335	Superstatistics and non-Gaussian diffusion. European Physical Journal: Special Topics, 2020, 229, 711-728	82.3	27
334	Particle dynamics and transport enhancement in a confined channel with position-dependent diffusivity. <i>New Journal of Physics</i> , 2020 , 22, 053016	2.9	22
333	Serotonergic Axons as Fractional Brownian Motion Paths: Insights Into the Self-Organization of Regional Densities. <i>Frontiers in Computational Neuroscience</i> , 2020 , 14, 56	3.5	4
332	Fractional Brownian motion with random diffusivity: emerging residual nonergodicity below the correlation time. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2020 , 53, 474001	2	23
331	Crossover dynamics from superdiffusion to subdiffusion: Models and solutions. <i>Fractional Calculus and Applied Analysis</i> , 2020 , 23, 55-102	2.7	11
330	Reflected fractional Brownian motion in one and higher dimensions. <i>Physical Review E</i> , 2020 , 102, 0321	08 .4	8
329	Transition path dynamics across rough inverted parabolic potential barrier. <i>European Physical Journal Plus</i> , 2020 , 135, 1	3.1	6
328	Modelling experimentally measured of ciprofloxacin antibiotic diffusion in Pseudomonas aeruginosa biofilm formed in artificial sputum medium. <i>PLoS ONE</i> , 2020 , 15, e0243003	3.7	8
327	Universal spectral features of different classes of random-diffusivity processes. <i>New Journal of Physics</i> , 2020 , 22, 063056	2.9	16
326	Unexpected crossovers in correlated random-diffusivity processes. <i>New Journal of Physics</i> , 2020 , 22, 083041	2.9	21
325	From single-particle stochastic kinetics to macroscopic reaction rates: fastest first-passage time of Nrandom walkers. <i>New Journal of Physics</i> , 2020 , 22, 103004	2.9	13
324	Resetting dynamics in a confining potential. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2020 , 53, 505003	2	16
323	Stochastic dynamics driven by combined L@y@aussian noise: fractional FokkerPlanckRolmogorov equation and solution. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2020 , 53, 385001	2	8
322	Transition path properties for one-dimensional systems driven by Poisson white noise. <i>Chaos, Solitons and Fractals,</i> 2020 , 141, 110293	9.3	1
321	Anomalous diffusion and nonergodicity for heterogeneous diffusion processes with fractional Gaussian noise. <i>Physical Review E</i> , 2020 , 102, 012146	2.4	20
320	Critical adsorption of multiple polyelectrolytes onto a nanosphere: splitting the adsorption-desorption transition boundary. <i>Journal of the Royal Society Interface</i> , 2020 , 17, 20200199	4.1	4
319	The diffusion of doxorubicin drug molecules in silica nanoslits is non-Gaussian, intermittent and anticorrelated. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 27955-27965	3.6	24
318	Diffusion of antibiotics through a biofilm in the presence of diffusion and absorption barriers. <i>Physical Review E</i> , 2020 , 102, 032408	2.4	8

(2019-2020)

317	Heterogeneous diffusion processes and nonergodicity with Gaussian colored noise in layered diffusivity landscapes. <i>Physical Review E</i> , 2020 , 102, 062106	2.4	7
316	Random coefficient autoregressive processes describe Brownian yet non-Gaussian diffusion in heterogeneous systems. <i>New Journal of Physics</i> , 2019 , 21, 073056	2.9	16
315	Transport in exclusion processes with one-step memory: density dependence and optimal acceleration. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2019 , 52, 385001	2	4
314	Gumbel central limit theorem for max-min and min-max. <i>Physical Review E</i> , 2019 , 100, 020104	2.4	5
313	Strange interfacial molecular dynamics. <i>Physics Today</i> , 2019 , 72, 48-54	0.9	33
312	Poisson-process limit laws yield Gumbel max-min and min-max. <i>Physical Review E</i> , 2019 , 100, 022129	2.4	4
311	Non-Gaussian, non-ergodic, and non-Fickian diffusion of tracers in mucin hydrogels. <i>Soft Matter</i> , 2019 , 15, 2526-2551	3.6	68
310	Spectral Content of a Single Non-Brownian Trajectory. <i>Physical Review X</i> , 2019 , 9,	9.1	41
309	Trapping of diffusing particles by periodic absorbing rings on a cylindrical tube. <i>Journal of Chemical Physics</i> , 2019 , 150, 206101	3.9	3
308	Money distribution in agent-based models with position-exchange dynamics: the Pareto paradigm revisited. <i>European Physical Journal B</i> , 2019 , 92, 1	1.2	3
307	Transient superdiffusion of polydisperse vacuoles in highly motile amoeboid cells. <i>Journal of Chemical Physics</i> , 2019 , 150, 144901	3.9	15
306	Codifference can detect ergodicity breaking and non-Gaussianity. <i>New Journal of Physics</i> , 2019 , 21, 053	0.83	16
305	Burst statistics in an early biofilm quorum sensing model: the role of spatial colony-growth heterogeneity. <i>Scientific Reports</i> , 2019 , 9, 12077	4.9	13
304	Single-trajectory spectral analysis of scaled Brownian motion. <i>New Journal of Physics</i> , 2019 , 21, 073043	2.9	19
303	First-passage properties of asymmetric Llay flights. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2019 , 52, 454004	2	20
302	First passage and first hitting times of LNy flights and LNy walks. New Journal of Physics, 2019 , 21, 10302	28 .9	32
301	Brownian motion and beyond: first-passage, power spectrum, non-Gaussianity, and anomalous diffusion. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2019 , 2019, 114003	1.9	13
300	Probability density of the fractional Langevin equation with reflecting walls. <i>Physical Review E</i> , 2019 , 100, 042142	2.4	18

299	Chemical Kinetics 2019 ,		14
298	Fractional Brownian motion in a finite interval: correlations effect depletion or accretion zones of particles near boundaries. <i>New Journal of Physics</i> , 2019 , 21, 022002	2.9	28
297	Correlations and transport in exclusion processes with general finite memory. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2019 , 2019, 103211	1.9	1
296	Full distribution of first exit times in the narrow escape problem. <i>New Journal of Physics</i> , 2019 , 21, 1220	Q1 9	28
295	Conservative random walks in confining potentials. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2019 , 52, 015001	2	6
294	First passage statistics for diffusing diffusivity. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2019 , 52, 04LT01	2	27
293	Acceleration of bursty multiprotein target search kinetics on DNA by colocalisation. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 7931-7946	3.6	9
292	Superstatistical generalised Langevin equation: non-Gaussian viscoelastic anomalous diffusion. <i>New Journal of Physics</i> , 2018 , 20, 023026	2.9	35
291	Random diffusivity from stochastic equations: comparison of two models for Brownian yet non-Gaussian diffusion. <i>New Journal of Physics</i> , 2018 , 20, 043044	2.9	81
290	Wealth distribution, Pareto law, and stretched exponential decay of money: Computer simulations analysis of agent-based models. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2018 , 490, 278-288	3.3	6
289	Biased continuous-time random walks for ordinary and equilibrium cases: facilitation of diffusion, ergodicity breaking and ageing. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 20827-20848	3.6	30
288	Fluctuations of random walks in critical random environments. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 20427-20438	3.6	9
287	Ergodicity, rejuvenation, enhancement, and slow relaxation of diffusion in biased continuous-time random walks. <i>Physical Review E</i> , 2018 , 98, 022105	2.4	16
286	Time averages and their statistical variation for the Ornstein-Uhlenbeck process: Role of initial particle distributions and relaxation to stationarity. <i>Physical Review E</i> , 2018 , 98, 022134	2.4	21
285	Non-Gaussianity, population heterogeneity, and transient superdiffusion in the spreading dynamics of amoeboid cells. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 23034-23054	3.6	36
284	A Less Invasive Approach to Rheology Measurements. <i>Physics Magazine</i> , 2018 , 11,	1.1	5
283	Strong defocusing of molecular reaction times results from an interplay of geometry and reaction control. <i>Communications Chemistry</i> , 2018 , 1,	6.3	70
282	Power spectral density of a single Brownian trajectory: what one can and cannot learn from it. <i>New Journal of Physics</i> , 2018 , 20, 023029	2.9	40

(2017-2018)

281	Crossover from anomalous to normal diffusion: truncated power-law noise correlations and applications to dynamics in lipid bilayers. <i>New Journal of Physics</i> , 2018 , 20, 103027	2.9	58	
280	Random multi-hopper model: super-fast random walks on graphs. <i>Journal of Complex Networks</i> , 2018 , 6, 382-403	1.7	20	
279	Bayesian analysis of single-particle tracking data using the nested-sampling algorithm: maximum-likelihood model selection applied to stochastic-diffusivity data. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 29018-29037	3.6	59	
278	Towards a full quantitative description of single-molecule reaction kinetics in biological cells. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 16393-16401	3.6	37	
277	From continuous time random walks to the generalized diffusion equation. <i>Fractional Calculus and Applied Analysis</i> , 2018 , 21, 10-28	2.7	53	
276	Gaussianity Fair: The Riddle of Anomalous yet Non-Gaussian Diffusion. <i>Biophysical Journal</i> , 2017 , 112, 413-415	2.9	44	
275	Manipulation and Motion of Organelles and Single Molecules in Living Cells. <i>Chemical Reviews</i> , 2017 , 117, 4342-4375	68.1	154	
274	Aging underdamped scaled Brownian motion: Ensemble- and time-averaged particle displacements, nonergodicity, and the failure of the overdamping approximation. <i>Physical Review E</i> , 2017 , 95, 012120	2.4	25	
273	First passage time statistics for two-channel diffusion. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2017 , 50, 084001	2	37	
272	Time averaging, ageing and delay analysis of financial time series. <i>New Journal of Physics</i> , 2017 , 19, 063	04.5	25	
271	Beyond monofractional kinetics. <i>Chaos, Solitons and Fractals</i> , 2017 , 102, 210-217	9.3	31	
270	A self-avoiding walk with neural delays as a model of fixational eye movements. <i>Scientific Reports</i> , 2017 , 7, 12958	4.9	17	
269	Diffusion of Integral Membrane Proteins in Protein-Rich Membranes. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 4308-4313	6.4	41	
268	Comparison of pure and combined search strategies for single and multiple targets. <i>European Physical Journal B</i> , 2017 , 90, 1	1.2	17	
267	Brownian yet Non-Gaussian Diffusion: From Superstatistics to Subordination of Diffusing Diffusivities. <i>Physical Review X</i> , 2017 , 7,	9.1	157	
266	Quantifying non-ergodicity of anomalous diffusion with higher order moments. <i>Scientific Reports</i> , 2017 , 7, 3878	4.9	50	
265	Critical adsorption of periodic and random polyampholytes onto charged surfaces. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 23397-23413	3.6	17	
264	Persistent Sinai-type diffusion in Gaussian random potentials with decaying spatial correlations. <i>Physical Review E</i> , 2017 , 96, 052134	2.4	11	

263	Ageing effects in ultraslow continuous time random walks. European Physical Journal B, 2017, 90, 1	1.2	11
262	Effects of the target aspect ratio and intrinsic reactivity onto diffusive search in bounded domains. <i>New Journal of Physics</i> , 2017 , 19, 103025	2.9	16
261	Preface: Marian Smoluchowski 1916 paper century of inspiration. <i>Journal of Physics A:</i> Mathematical and Theoretical, 2017 , 50, 380301	2	11
260	Facilitated Diffusion of Transcription Factor Proteins with Anomalous Bulk Diffusion. <i>Journal of Physical Chemistry B</i> , 2017 , 121, 1284-1289	3.4	22
259	Active transport improves the precision of linear long distance molecular signalling. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016 , 49, 364001	2	8
258	Protein Crowding in Lipid Bilayers Gives Rise to Non-Gaussian Anomalous Lateral Diffusion of Phospholipids and Proteins. <i>Physical Review X</i> , 2016 , 6,	9.1	110
257	Interactions of rod-like particles on responsive elastic sheets. <i>Soft Matter</i> , 2016 , 12, 7908-19	3.6	13
256	Underdamped scaled Brownian motion: (non-)existence of the overdamped limit in anomalous diffusion. <i>Scientific Reports</i> , 2016 , 6, 30520	4.9	55
255	Critical adsorption of polyelectrolytes onto planar and convex highly charged surfaces: the nonlinear Poisson B oltzmann approach. <i>New Journal of Physics</i> , 2016 , 18, 083037	2.9	19
254	Comb Model with Slow and Ultraslow Diffusion. <i>Mathematical Modelling of Natural Phenomena</i> , 2016 , 11, 18-33	3	31
253	Anomalous, non-Gaussian tracer diffusion in crowded two-dimensional environments. <i>New Journal of Physics</i> , 2016 , 18, 013027	2.9	96
252	Non-Brownian diffusion in lipid membranes: Experiments and simulations. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2016 , 1858, 2451-2467	3.8	167
251	First passage time distribution in heterogeneity controlled kinetics: going beyond the mean first passage time. <i>Scientific Reports</i> , 2016 , 6, 20349	4.9	66
250	Universal Proximity Effect in Target Search Kinetics in the Few-Encounter Limit. <i>Physical Review X</i> , 2016 , 6,	9.1	74
249	Ageing ScherMontroll Transport. <i>Transport in Porous Media</i> , 2016 , 115, 327-344	3.1	11
248	A single predator charging a herd of prey: effects of self volume and predatorprey decision-making. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016 , 49, 225601	2	17
247	Anomalous diffusion in time-fluctuating non-stationary diffusivity landscapes. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 23840-52	3.6	54
246	Search reliability and search efficiency of combined LlyBrownian motion: long relocations mingled with thorough local exploration. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2016 , 49, 394002	2	21

(2015-2015)

Diffusion and Fokker-Planck-Smoluchowski Equations with Generalized Memory Kernel. <i>Fractional Calculus and Applied Analysis</i> , 2015 , 18, 1006-1038	2.7	64
Superdiffusion dominates intracellular particle motion in the supercrowded cytoplasm of pathogenic Acanthamoeba castellanii. <i>Scientific Reports</i> , 2015 , 5, 11690	4.9	115
Conformational properties of complex polymers: rosette versus star-like structures. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015 , 48, 135001	2	11
Aging scaled Brownian motion. <i>Physical Review E</i> , 2015 , 91, 042107	2.4	34
Ergodicity breaking, ageing, and confinement in generalized diffusion processes with position and time dependent diffusivity. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2015 , 2015, P05010	1.9	41
Inverted critical adsorption of polyelectrolytes in confinement. <i>Soft Matter</i> , 2015 , 11, 4430-43	3.6	47
Ultraslow scaled Brownian motion. New Journal of Physics, 2015, 17, 063038	2.9	37
Ergodicity breaking and particle spreading in noisy heterogeneous diffusion processes. <i>Journal of Chemical Physics</i> , 2015 , 142, 144105	3.9	17
Geometry controlled anomalous diffusion in random fractal geometries: looking beyond the infinite cluster. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 30134-47	3.6	22
Quantifying non-ergodic dynamics of force-free granular gases. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 21791-8	3.6	35
Non-Ergodicity and Ageing in Anomalous Diffusion 2015 , 111-151		
Kinetics of polymer looping with macromolecular crowding: effects of volume fraction and crowder size. <i>Soft Matter</i> , 2015 , 11, 472-88	3.6	76
Non-universal tracer diffusion in crowded media of non-inert obstacles. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 1847-58	3.6	92
Signal focusing through active transport. <i>Physical Review E</i> , 2015 , 92, 010701	2.4	21
Distributed-order diffusion equations and multifractality: Models and solutions. <i>Physical Review E</i> , 2015 , 92, 042117	2.4	66
Variance-corrected Michaelis-Menten equation predicts transient rates of single-enzyme reactions and response times in bacterial gene-regulation. <i>Scientific Reports</i> , 2015 , 5, 17820	4.9	22
Real sequence effects on the search dynamics of transcription factors on DNA. <i>Scientific Reports</i> , 2015 , 5, 10072	4.9	41
Ageing first passage time density in continuous time random walks and quenched energy landscapes. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015 , 48, 285001	2	10
	Superdiffusion dominates intracellular particle motion in the supercrowded cytoplasm of pathogenic Acanthamoeba castellanii. <i>Scientific Reports</i> , 2015, 5, 11690 Conformational properties of complex polymers: rosette versus star-like structures. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015, 48, 135001 Aging scaled Brownian motion. <i>Physical Review E</i> , 2015, 91, 042107 Ergodicity breaking, ageing, and confinement in generalized diffusion processes with position and time dependent diffusivity. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2015, 2015, P05010 Inverted critical adsorption of polyelectrolytes in confinement. <i>Soft Matter</i> , 2015, 11, 4430-43 Ultraslow scaled Brownian motion. <i>New Journal of Physics</i> , 2015, 17, 063038 Ergodicity breaking and particle spreading in noisy heterogeneous diffusion processes. <i>Journal of Chemical Physics</i> , 2015, 142, 144105 Geometry controlled anomalous diffusion in random fractal geometries: looking beyond the infinite cluster. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 30134-47 Quantifying non-ergodic dynamics of force-free granular gases. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 21791-8 Non-Ergodicity and Ageing in Anomalous Diffusion 2015, 111-151 Kinetics of polymer looping with macromolecular crowding: effects of volume fraction and crowder size. <i>Soft Matter</i> , 2015, 11, 472-88 Non-universal tracer diffusion in crowded media of non-inert obstacles. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 1847-58 Signal focusing through active transport. <i>Physical Review E</i> , 2015, 92, 010701 Distributed-order diffusion equations and multifractality: Models and solutions. <i>Physical Review E</i> , 2015, 92, 042117 Variance-corrected Michaelis-Menten equation predicts transient rates of single-enzyme reactions and response times in bacterial gene-regulation. <i>Scientific Reports</i> , 2015, 5, 17820 Real sequence effects on the search dynamics of transcription factors on DNA. <i>Scientific Reports</i> , 2015, 5, 10072	Superdiffusion dominates intracellular particle motion in the supercrowded cytoplasm of pathogenic Acanthamoeba castellanii. Scientific Reports, 2015, 5, 11690 Conformational properties of complex polymers: rosette versus star-like structures. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 135001 Aging scaled Brownian motion. Physical Review E, 2015, 91, 042107 24 Ergodicity breaking, ageing, and confinement in generalized diffusion processes with position and time dependent diffusivity. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P05010 Inverted critical adsorption of polyelectrolytes in confinement. Soft Matter, 2015, 11, 4430-43 3,6 Ultraslow scaled Brownian motion. New Journal of Physics, 2015, 17, 063038 2,9 Ergodicity breaking and particle spreading in noisy heterogeneous diffusion processes. Journal of Chemical Physics, 2015, 142, 144105 Geometry controlled anomalous diffusion in random fractal geometries: looking beyond the infinite cluster. Physical Chemistry Chemical Physics, 2015, 17, 30134-47 Quantifying non-ergodic dynamics of force-free granular gases. Physical Chemistry Chemical Physics, 2015, 17, 21791-8 Non-Ergodicity and Ageing in Anomalous Diffusion 2015, 111-151 Kinetics of polymer looping with macromolecular crowding: effects of volume fraction and crowder size. Soft Matter, 2015, 11, 472-88 Non-universal tracer diffusion in crowded media of non-inert obstacles. Physical Chemistry Chemical Physics, 2015, 17, 1847-58 Signal focusing through active transport. Physical Review E, 2015, 92, 010701 2,4 Distributed-order diffusion equations and multifractality: Models and solutions. Physical Review E, 24 Variance-corrected Michaelis-Menten equation predicts transient rates of single-enzyme reactions and response times in bacterial gene-regulation. Scientific Reports, 2015, 5, 17820 Ageing first passage time density in continuous time random walks and quenched energy Ageing first passage time density in continuous time random walks and que

227	Facilitation of polymer looping and giant polymer diffusivity in crowded solutions of active particles. <i>New Journal of Physics</i> , 2015 , 17, 113008	2.9	56
226	Optimization and universality of Brownian search in a basic model of quenched heterogeneous media. <i>Physical Review E</i> , 2015 , 91, 052134	2.4	14
225	Self-subdiffusion in solutions of star-shaped crowders: non-monotonic effects of inter-particle interactions. <i>New Journal of Physics</i> , 2015 , 17, 113028	2.9	14
224	Quantifying the non-ergodicity of scaled Brownian motion. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2015 , 48, 375002	2	35
223	Weak ergodicity breaking and ageing in anomalous diffusion. <i>International Journal of Modern Physics Conference Series</i> , 2015 , 36, 1560007	0.7	7
222	Polymer Looping Is Controlled by Macromolecular Crowding, Spatial Confinement, and Chain Stiffness. <i>ACS Macro Letters</i> , 2015 , 4, 202-206	6.6	58
221	Correlation functions for the fractional generalized Langevin equation in the presence of internal and external noise. <i>Journal of Mathematical Physics</i> , 2014 , 55, 023301	1.2	40
220	Levy flights do not always optimize random blind search for sparse targets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 2931-6	11.5	133
219	Aging Renewal Theory and Application to Random Walks. <i>Physical Review X</i> , 2014 , 4,	9.1	93
218	Polymer translocation: the first two decades and the recent diversification. <i>Soft Matter</i> , 2014 , 10, 9016	- 3 7.6	132
217	Critical adsorption of polyelectrolytes onto charged Janus nanospheres. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 15539-50	3.6	40
216	Scaled Brownian motion: a paradoxical process with a time dependent diffusivity for the description of anomalous diffusion. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 15811-7	3.6	125
		١ ١	
215	Particle invasion, survival, and non-ergodicity in 2D diffusion processes with space-dependent diffusivity. <i>Soft Matter</i> , 2014 , 10, 1591-601	3.6	79
215		3.6 3.6	79 38
	diffusivity. <i>Soft Matter</i> , 2014 , 10, 1591-601 Molecular motors pulling cargos in the viscoelastic cytosol: how power strokes beat subdiffusion.		
214	Molecular motors pulling cargos in the viscoelastic cytosol: how power strokes beat subdiffusion. Physical Chemistry Chemical Physics, 2014, 16, 16524-35 Deformation propagation in responsive polymer network films. Journal of Chemical Physics, 2014,	3.6	38
214	Molecular motors pulling cargos in the viscoelastic cytosol: how power strokes beat subdiffusion. Physical Chemistry Chemical Physics, 2014, 16, 16524-35 Deformation propagation in responsive polymer network films. Journal of Chemical Physics, 2014, 141, 074903 Diffusion of finite-size particles in two-dimensional channels with random wall configurations.	3.6	38

209	First-passage statistics for aging diffusion in systems with annealed and quenched disorder. <i>Physical Review E</i> , 2014 , 89, 040101	2.4	31
208	Mixing and segregation of ring polymers: spatial confinement and molecular crowding effects. <i>New Journal of Physics</i> , 2014 , 16, 053047	2.9	54
207	First Passage Behavior of Multi-Dimensional Fractional Brownian Motion and Application to Reaction Phenomena 2014 , 175-202		4
206	Trajectory-to-Trajectory Fluctuations in First-Passage Phenomena in Bounded Domains 2014 , 203-225		5
205	Space-fractional FokkerPlanck equation and optimization of random search processes in the presence of an external bias. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2014 , 2014, P1103	1 ^{1.9}	19
204	How molecular motors work in the crowded environment of living cells: coexistence and efficiency of normal and anomalous transport. <i>PLoS ONE</i> , 2014 , 9, e91700	3.7	65
203	Ageing and confinement in non-ergodic heterogeneous diffusion processes. <i>Journal of Physics A:</i> Mathematical and Theoretical, 2014 , 47, 485002	2	36
202	Localisation and universal fluctuations in ultraslow diffusion processes. <i>Journal of Physics A:</i> Mathematical and Theoretical, 2014 , 47, 492002	2	35
201	Severe slowing-down and universality of the dynamics in disordered interacting many-body systems: ageing and ultraslow diffusion. <i>New Journal of Physics</i> , 2014 , 16, 113050	2.9	38
200	Speeding up the first-passage for subdiffusion by introducing a finite potential barrier. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2014 , 47, 032002	2	2
199	Collective dynamics effect transient subdiffusion of inert tracers in flexible gel networks. <i>New Journal of Physics</i> , 2014 , 16, 092002	2.9	59
198	Breathing dynamics based parameter sensitivity analysis of hetero-polymeric DNA. <i>Journal of Chemical Physics</i> , 2014 , 140, 125101	3.9	2
197	Ageing single file motion. European Physical Journal: Special Topics, 2014, 223, 3287-3293	2.3	6
196	Numerical approach to unbiased and driven generalized elastic model. <i>Journal of Chemical Physics</i> , 2014 , 140, 024106	3.9	5
195	Sensing Viruses by Mechanical Tension of DNA in Responsive Hydrogels. <i>Physical Review X</i> , 2014 , 4,	9.1	13
194	First-Passage Phenomena and Their Applications 2014 ,		134
193	Noisy continuous time random walks. <i>Journal of Chemical Physics</i> , 2013 , 139, 121916	3.9	75
192	Stochastic optimization-based study of dimerization kinetics. <i>Journal of Chemical Sciences</i> , 2013 , 125, 1619-1627	1.8	6

191	Anomalous diffusion and power-law relaxation of the time averaged mean squared displacement in worm-like micellar solutions. <i>New Journal of Physics</i> , 2013 , 15, 045011	2.9	137
190	Population splitting, trapping, and non-ergodicity in heterogeneous diffusion processes. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 20220-35	3.6	95
189	Anomalous and normal diffusion of proteins and lipids in crowded lipid membranes. <i>Faraday Discussions</i> , 2013 , 161, 397-417; discussion 419-59	3.6	146
188	Anomalous statistics of random relaxations in random environments. <i>Physical Review E</i> , 2013 , 87, 0221	42.4	5
187	Aging effects and population splitting in single-particle trajectory averages. <i>Physical Review Letters</i> , 2013 , 110, 020602	7.4	99
186	Area coverage of radial Lᡚy flights with periodic boundary conditions. <i>Physical Review E</i> , 2013 , 87, 0421	3 6 .4	22
185	Distance matters: the impact of gene proximity in bacterial gene regulation. <i>Physical Review Letters</i> , 2013 , 110, 198101	7.4	96
184	Microscopic origin of the logarithmic time evolution of aging processes in complex systems. <i>Physical Review Letters</i> , 2013 , 110, 208301	7.4	43
183	Linear response, fluctuation-dissipation, and finite-system-size effects in superdiffusion. <i>Physical Review E</i> , 2013 , 88, 012116	2.4	35
182	Finite-time effects and ultraweak ergodicity breaking in superdiffusive dynamics. <i>Physical Review Letters</i> , 2013 , 110, 020603	7.4	68
181	Correlated continuous time random walks: combining scale-invariance with long-range memory for spatial and temporal dynamics. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2013 , 46, 475001	2	24
180	Anomalous diffusion and ergodicity breaking in heterogeneous diffusion processes. <i>New Journal of Physics</i> , 2013 , 15, 083039	2.9	181
179	Bulk-mediated Surface Diffusion on a Cylinder in the Fast Exchange Limit. <i>Mathematical Modelling of Natural Phenomena</i> , 2013 , 8, 114-126	3	1
178	Quantification of noise in bifunctionality-induced post-translational modification. <i>Physical Review E</i> , 2013 , 88, 032716	2.4	2
177	Transient aging in fractional Brownian and Langevin-equation motion. <i>Physical Review E</i> , 2013 , 88, 062	1244	32
176	Publisher's Note: Area coverage of radial L∏y flights with periodic boundary conditions [Phys. Rev. E 87, 042136 (2013)]. <i>Physical Review E</i> , 2013 , 87,	2.4	2
175	In vivo facilitated diffusion model. <i>PLoS ONE</i> , 2013 , 8, e53956	3.7	63
174	Fractional Klein-Kramers Equations: Subdiffusive and Superdiffusive Cases. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , 2013 , 179-194	0.2	2

173	Generalized spacelime fractional diffusion equation with composite fractional time derivative. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2012 , 391, 2527-2542	3.3	54
172	Velocity and displacement correlation functions for fractional generalized Langevin equations. <i>Fractional Calculus and Applied Analysis</i> , 2012 , 15,	2.7	30
171	Diffusion inside living human cells. European Physical Journal: Special Topics, 2012, 204, 75-84	2.3	31
170	Generalized facilitated diffusion model for DNA-binding proteins with search and recognition states. <i>Biophysical Journal</i> , 2012 , 102, 2321-30	2.9	82
169	Quantifying supercoiling-induced denaturation bubbles in DNA. Soft Matter, 2012, 8, 8651	3.6	45
168	Strange kinetics of single molecules in living cells. <i>Physics Today</i> , 2012 , 65, 29-35	0.9	382
167	Anomalous diffusion of phospholipids and cholesterols in a lipid bilayer and its origins. <i>Physical Review Letters</i> , 2012 , 109, 188103	7.4	211
166	The role of ergodicity in anomalous stochastic processes: analysis of single-particle trajectories. <i>Physica Scripta</i> , 2012 , 86, 058510	2.6	8
165	Inequivalence of time and ensemble averages in ergodic systems: exponential versus power-law relaxation in confinement. <i>Physical Review E</i> , 2012 , 85, 021147	2.4	85
164	First passages in bounded domains: when is the mean first passage time meaningful?. <i>Physical Review E</i> , 2012 , 86, 031143	2.4	101
163	Correlated continuous-time random walks in external force fields. <i>Physical Review E</i> , 2012 , 85, 051103	2.4	60
162	Correlated continuous-time random walks a caling limits and Langevin picture. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2012 , 2012, P04010	1.9	26
161	The RARE model: A generalized approach to random relaxation processes in disordered systems. Journal of Chemical Physics, 2012 , 137, 234106	3.9	6
160	Publisher Note: Inequivalence of time and ensemble averages in ergodic systems: Exponential versus power-law relaxation in confinement [Phys. Rev. E 85, 021147 (2012)]. <i>Physical Review E</i> , 2012 , 85,	2.4	3
159	Bulk-mediated diffusion on a planar surface: full solution. <i>Physical Review E</i> , 2012 , 86, 041101	2.4	41
158	A solution to the subdiffusion-efficiency paradox: Inactive states enhance reaction efficiency at subdiffusion conditions in living cells. <i>Europhysics Letters</i> , 2012 , 97, 20008	1.6	19
157	How a finite potential barrier decreases the mean first-passage time. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2012 , 2012, L03001	1.9	11
156	Intermembrane docking reactions are regulated by membrane curvature. <i>Biophysical Journal</i> , 2011 , 101, 2693-703	2.9	8

155	Single particle tracking in systems showing anomalous diffusion: the role of weak ergodicity breaking. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 1800-12	3.6	263
154	First passage time distribution of chaperone driven polymer translocation through a nanopore: homopolymer and heteropolymer cases. <i>Journal of Chemical Physics</i> , 2011 , 135, 245102	3.9	15
153	Fractional diffusion equation with a generalized Riemann Liouville time fractional derivative. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2011 , 44, 255203	2	72
152	Sequence dependence of the binding energy in chaperone-driven polymer translocation through a nanopore. <i>Physical Review E</i> , 2011 , 83, 011902	2.4	30
151	In vivo anomalous diffusion and weak ergodicity breaking of lipid granules. <i>Physical Review Letters</i> , 2011 , 106, 048103	7.4	472
150	Residual mean first-passage time for jump processes: theory and applications to L\(\mathbb{Q}\)y flights and fractional Brownian motion. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2011 , 44, 255003	2	12
149	Encounter distribution of two random walkers on a finite one-dimensional interval. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2011 , 44, 395005	2	13
148	First passage behaviour of fractional Brownian motion in two-dimensional wedge domains. <i>Europhysics Letters</i> , 2011 , 94, 20008	1.6	32
147	Determining the DNA stability parameters for the breathing dynamics of heterogeneous DNA by stochastic optimization. <i>Journal of Chemical Physics</i> , 2011 , 135, 165103	3.9	19
146	The chain sucker: translocation dynamics of a polymer chain into a long narrow channel driven by longitudinal flow. <i>Journal of Chemical Physics</i> , 2011 , 134, 135102	3.9	33
145	Effective surface motion on a reactive cylinder of particles that perform intermittent bulk diffusion. <i>Journal of Chemical Physics</i> , 2011 , 134, 204116	3.9	21
144	Fractional Dynamics 2011 ,		104
143	Anomalous Diffusion and Fractional Transport Equations 2011 , 3-32		2
142	Aging and nonergodicity beyond the Khinchin theorem. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 13228-33	11.5	127
141	Kramers-like escape driven by fractional Gaussian noise. <i>Physical Review E</i> , 2010 , 81, 041119	2.4	46
140	Fractional Brownian motion and motion governed by the fractional Langevin equation in confined geometries. <i>Physical Review E</i> , 2010 , 81, 021103	2.4	174
139	Polymer translocation into laterally unbounded confined environments. <i>Journal of Chemical Physics</i> , 2010 , 133, 075101	3.9	15
138	Quantitative analysis of single particle trajectories: mean maximal excursion method. <i>Biophysical Journal</i> , 2010 , 98, 1364-72	2.9	162

137	Polymer translocation into a fluidic channel through a nanopore. <i>Physical Review E</i> , 2010 , 82, 021922	2.4	36
136	Supercoiling induces denaturation bubbles in circular DNA. <i>Physical Review Letters</i> , 2010 , 105, 208101	7.4	64
135	Analysis of short subdiffusive time series: scatter of the time-averaged mean-squared displacement. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2010 , 43, 252001	2	49
134	Anomalous diffusion in correlated continuous time random walks. <i>Journal of Physics A:</i> Mathematical and Theoretical, 2010 , 43, 082002	2	96
133	Polymer translocation through nanopores: Parking lot problems, scaling laws and their breakdown. <i>European Physical Journal: Special Topics</i> , 2010 , 189, 119-134	2.3	20
132	Fractional calculus approach to the statistical characterization of random variables and vectors. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2010 , 389, 909-920	3.3	23
131	Wonderful world of single biopolymer thermodynamics. Comment on "Biophysical characterization of DNA binding from single molecule force measurements" by K.R. Chaurasiya et al. <i>Physics of Life Reviews</i> , 2010 , 7, 355-7; discussion 358-61	2.1	1
130	Role of DNA Conformations in Gene Regulation 2010 , 69-84		
129	Polymer translocation out of confined environments. <i>Physical Review E</i> , 2009 , 80, 021907	2.4	24
	Professional Communication of the Communication of		
128	Finding the optimum activation energy in DNA breathing dynamics: a simulated annealing approach. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2009 , 42, 335101	2	7
128 127		2	7
	approach. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 335101 And did he search for you, and could not find you?. Journal of Physics A: Mathematical and		
127	approach. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 335101 And did he search for you, and could not find you?. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 434005	3	
127	approach. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 335101 And did he search for you, and could not find you?. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 434005 Polymer physics of the cell. Preface. Physical Biology, 2009, 6, 020301	3	13
127 126 125	approach. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 335101 And did he search for you, and could not find you?. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 434005 Polymer physics of the cell. Preface. Physical Biology, 2009, 6, 020301 Single DNA denaturation and bubble dynamics. Journal of Physics Condensed Matter, 2009, 21, 034111 Bulk-mediated surface diffusion along a cylinder: Propagators and crossovers. Physical Review E,	2 3 1.8	13 15
127 126 125	approach. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 335101 And did he search for you, and could not find you?. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 434005 Polymer physics of the cell. Preface. Physical Biology, 2009, 6, 020301 Single DNA denaturation and bubble dynamics. Journal of Physics Condensed Matter, 2009, 21, 034111 Bulk-mediated surface diffusion along a cylinder: Propagators and crossovers. Physical Review E, 2009, 79, 040105 Driven polymer translocation through nanopores: Slow-vsfast dynamics. Europhysics Letters, 2009,	2 3 1.8	13 15 39
127 126 125 124	approach. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 335101 And did he search for you, and could not find you?. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 434005 Polymer physics of the cell. Preface. Physical Biology, 2009, 6, 020301 Single DNA denaturation and bubble dynamics. Journal of Physics Condensed Matter, 2009, 21, 034111 Bulk-mediated surface diffusion along a cylinder: Propagators and crossovers. Physical Review E, 2009, 79, 040105 Driven polymer translocation through nanopores: Slow-vsfast dynamics. Europhysics Letters, 2009, 88, 68006	2 3 1.8 2.4	13 15 39 108

119	Bubble merging in breathing DNA as a vicious walker problem in opposite potentials. <i>Journal of Chemical Physics</i> , 2009 , 130, 164117	3.9	5
118	Random time-scale invariant diffusion and transport coefficients. <i>Physical Review Letters</i> , 2008 , 101, 058101	7.4	394
117	Levy strategies in intermittent search processes are advantageous. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 11055-11059	11.5	186
116	How DNA coiling enhances target localization by proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 15738-42	11.5	159
115	Denaturation transition of stretched DNA. <i>Physical Review Letters</i> , 2008 , 100, 018106	7.4	59
114	Breathing dynamics in heteropolymer DNA. <i>Biophysical Journal</i> , 2007 , 92, 2674-84	2.9	45
113	Some fundamental aspects of L\(\textstyle{U}\)y flights. Chaos, Solitons and Fractals, 2007, 34, 129-142	9.3	46
112	Leapover lengths and first passage time statistics for L\(\bar{\pi}\)y flights. <i>Physical Review Letters</i> , 2007 , 99, 1600	5 9 24	92
111	Barrier crossing driven by L\(\mathbb{U}\)y noise: universality and the role of noise intensity. <i>Physical Review E</i> , 2007 , 75, 041101	2.4	62
110	Master equation approach to DNA breathing in heteropolymer DNA. <i>Physical Review E</i> , 2007 , 75, 02190	82.4	18
109	DNA bubble dynamics as a quantum Coulomb problem. <i>Physical Review Letters</i> , 2007 , 98, 070601	7.4	64
108	Manipulating single enzymes by an external harmonic force. <i>Physical Review Letters</i> , 2007 , 98, 168302	7.4	19
107	Subdiffusion and weak ergodicity breaking in the presence of a reactive boundary. <i>Physical Review Letters</i> , 2007 , 98, 200603	7.4	100
106	Anomalous Stochastic Processes in the Fractional Dynamics Framework: Fokker-Planck Equation, Dispersive Transport, and Non-Exponential Relaxation. <i>Advances in Chemical Physics</i> , 2007 , 223-264		40
105	Bubble coalescence in breathing DNA: Two vicious walkers in opposite potentials. <i>Europhysics Letters</i> , 2007 , 77, 48001	1.6	13
104	Dynamics of DNA breathing: weak noise analysis, finite time singularity, and mapping onto the quantum Coulomb problem. <i>Physical Review E</i> , 2007 , 76, 061915	2.4	22
103	Fractal dimension and localization of DNA knots. <i>Physical Review Letters</i> , 2007 , 98, 058102	7.4	103
102	Diffusion mechanisms of localised knots along a polymer. <i>Europhysics Letters</i> , 2006 , 76, 696-702	1.6	59

(2004-2006)

101	Sequence sensitivity of breathing dynamics in heteropolymer DNA. <i>Physical Review Letters</i> , 2006 , 97, 128105	7.4	65
100	Directed motion emerging from two coupled random processes: translocation of a chain through a membrane nanopore driven by binding proteins. <i>Journal of Physics Condensed Matter</i> , 2005 , 17, S3945-	64 ^{.8}	40
99	Target search of N sliding proteins on a DNA. <i>Biophysical Journal</i> , 2005 , 89, 895-902	2.9	89
98	Dynamic approach to DNA breathing. <i>Journal of Biological Physics</i> , 2005 , 31, 339-50	1.6	13
97	Stochastic approach to DNA breathing dynamics. <i>Europhysics Letters</i> , 2005 , 71, 852-858	1.6	25
96	Blinking statistics of a molecular beacon triggered by end-denaturation of DNA. <i>Journal of Physics Condensed Matter</i> , 2005 , 17, S4305-S4316	1.8	4
95	Binding dynamics of single-stranded DNA binding proteins to fluctuating bubbles in breathing DNA. <i>Journal of Physics Condensed Matter</i> , 2005 , 17, S1841-S1869	1.8	26
94	Natural cutoff in L\(\textsize{\Omega}\)y flights caused by dissipative nonlinearity. <i>Physical Review E</i> , 2005 , 72, 010101	2.4	35
93	Coupled dynamics of DNA breathing and of proteins that selectively bind to single-stranded DNA. <i>Physical Review E</i> , 2005 , 72, 030901	2.4	24
92	First passage time of N excluded-volume particles on a line. <i>Physical Review E</i> , 2005 , 72, 041102	2.4	28
91	Optimal target search on a fast-folding polymer chain with volume exchange. <i>Physical Review Letters</i> , 2005 , 95, 260603	7.4	189
90	Barrier crossing of a L∏y flight. <i>Europhysics Letters</i> , 2005 , 72, 348-354	1.6	62
89	Dynamics of DNA conformations and DNA-protein interactions. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 899, 1		
88	Sensing DNADNA as Nanosensor: A Perspective Towards Nanobiotechnology. <i>Journal of Computational and Theoretical Nanoscience</i> , 2005 , 2, 389-395	0.3	9
87	Non-uniqueness of the first passage time density of $L\overline{u}y$ random processes. <i>Journal of Physics A</i> , 2004 , 37, L609-L615		26
86	Chaperone-assisted translocation. <i>Physical Biology</i> , 2004 , 1, 77-88	3	54
85	Exact solution of a linear molecular motor model driven by two-step fluctuations and subject to protein friction. <i>Physical Review E</i> , 2004 , 70, 021905	2.4	13
84	Comment on "Anomalous heat conduction and anomalous diffusion in one-dimensional systems". <i>Physical Review Letters</i> , 2004 , 92, 089401; author reply 089402	7.4	5

83	LMy Flights in a Steep Potential Well. <i>Journal of Statistical Physics</i> , 2004 , 115, 1505-1535	1.5	110
82	The restaurant at the end of the random walk: recent developments in the description of anomalous transport by fractional dynamics. <i>Journal of Physics A</i> , 2004 , 37, R161-R208		1633
81	Nonspecific binding of the OR repressors CI and Cro of bacteriophage lambda. <i>Journal of Theoretical Biology</i> , 2004 , 231, 525-33	2.3	24
80	Helical packaging of semiflexible polymers in bacteriophages. <i>European Biophysics Journal</i> , 2004 , 33, 497-505	1.9	10
79	Two states do not necessarily correspond to a two-state transition: vanE Hoff enthalpy in the case of a small entropy difference between the states. <i>Chemical Physics Letters</i> , 2004 , 398, 190-193	2.5	5
78	Sensitivity of Phage Lambda upon Variations of the Gibbs Free Energy. <i>Israel Journal of Chemistry</i> , 2004 , 44, 309-315	3.4	2
77	In vivo non-specific binding of lambda CI and Cro repressors is significant. <i>FEBS Letters</i> , 2004 , 563, 66-8	3.8	34
76	Sensitivity of OR in phage lambda. <i>Biophysical Journal</i> , 2004 , 86, 58-66	2.9	23
75	CRITICAL SWITCHING BEHAVIOUR IN SPARSELY POPULATED SYSTEMS. <i>International Journal of Modern Physics B</i> , 2003 , 17, 5893-5904	1.1	
74	Tight and loose shapes in flat entangled dense polymers. European Physical Journal E, 2003, 12, 347-354	1.5	18
73	Fractional relaxation processes and fractional rheological models for the description of a class of viscoelastic materials. <i>International Journal of Plasticity</i> , 2003 , 19, 941-959	7.6	84
72	Bubble dynamics in DNA. <i>Journal of Physics A</i> , 2003 , 36, L473-L480		64
71	Towards deterministic equations for L Ω y walks: the fractional material derivative. <i>Physical Review E</i> , 2003 , 67, 010101	2.4	78
70	Entropy loss in long-distance DNA looping. <i>Biophysical Journal</i> , 2003 , 85, 167-73	2.9	33
69	When translocation dynamics becomes anomalous. <i>Biophysical Journal</i> , 2003 , 85, 2776-9	2.9	101
68	First passage and arrival time densities for L Ω y flights and the failure of the method of images. Journal of Physics A, 2003 , 36, L537-L544		115
67	Topology matters: Some aspects of DNA physics. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 790, 1		О
66	Bifurcation, bimodality, and finite variance in confined L\(\mathbb{Q}\)y flights. <i>Physical Review E</i> , 2003 , 67, 010102	2.4	106

(2001-2003)

65	Comment on "Why is the DNA denaturation transition first order?". <i>Physical Review Letters</i> , 2003 , 90, 159801; author reply 159802	7.4	19
64	Space- and time-fractional diffusion and wave equations, fractional FokkerPlanck equations, and physical motivation. <i>Chemical Physics</i> , 2002 , 284, 67-90	2.3	164
63	Stationary states of non-linear oscillators driven by Lūy noise. <i>Chemical Physics</i> , 2002 , 284, 233-251	2.3	113
62	Number fluctuations and the threshold model of kinetic switches. <i>Chemical Physics</i> , 2002 , 284, 469-479	2.3	19
61	Towards the molecular workshop: entropy-driven designer molecules, entropy activation, and nanomechanical devices. <i>Chemical Physics Letters</i> , 2002 , 359, 22-26	2.5	23
60	Tightness of slip-linked polymer chains. <i>Physical Review E</i> , 2002 , 65, 061103	2.4	28
59	Force-extension relations for polymers with sliding links. <i>Physical Review E</i> , 2002 , 66, 022102	2.4	16
58	Equilibrium shapes of flat knots. <i>Physical Review Letters</i> , 2002 , 88, 188101	7.4	88
57	Diffusion on random-site percolation clusters: theory and NMR microscopy experiments with model objects. <i>Physical Review E</i> , 2002 , 65, 021112	2.4	69
56	Superdiffusive Klein-Kramers equation: Normal and ano malous time evolution and L\(\bar{\psi} \) walk moments. <i>Europhysics Letters</i> , 2002 , 58, 482-488	1.6	32
55	From stretched exponential to inverse power-law: fractional dynamics, ColeCole relaxation processes, and beyond. <i>Journal of Non-Crystalline Solids</i> , 2002 , 305, 81-87	3.9	106
54	The dynamical foundation of fractal stream chemistry: The origin of extremely long retention times. <i>Geophysical Research Letters</i> , 2002 , 29, 5-1-5-4	4.9	152
53	Physical pictures of transport in heterogeneous media: Advection-dispersion, random-walk, and fractional derivative formulations. <i>Water Resources Research</i> , 2002 , 38, 9-1-9-12	5.4	211
52	Localization behaviour in a phenomenological model of three-dimensional knots. <i>New Journal of Physics</i> , 2002 , 4, 91-91	2.9	7
51	Llly meets Boltzmann: strange initial conditions for Brownian and fractional Fokker P lanck equations. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2001 , 302, 290-296	3.3	11
50	ACCELERATING THROUGH A POTENTIAL LANDSCAPE: A FRACTIONAL DYNAMICS APPROACH TO ENHANCED MOTION IN AN EXTERNAL FORCE FIELD?. <i>International Journal of Modern Physics B</i> , 2001 , 15, 2351-2358	1.1	
49	The future is noisy: the role of spatial fluctuations in genetic switching. <i>Physical Review Letters</i> , 2001 , 87, 068103	7.4	33
48	Molecular switching with nonexponential relaxation patterns: a random walk approach. <i>Physical Review E</i> , 2001 , 63, 012103	2.4	3

47	Non-homogeneous random walks, generalised master equations, fractional Fokker-Planck equations, and the generalised Kramers-Moyal expansion. <i>European Physical Journal B</i> , 2001 , 19, 249-25	5g ^{1.2}	19
46	From the Langevin equation to the fractional FokkerPlanck equation. <i>AIP Conference Proceedings</i> , 2000 ,	О	2
45	Spatial Fluctuations and the Flipping of the Genetic Switch in a Cellular System. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 651, 1		
44	The fractional Fokker-Planck equation: dispersive transport in an external force field. <i>Journal of Molecular Liquids</i> , 2000 , 86, 219-228	6	27
43	The random walk's guide to anomalous diffusion: a fractional dynamics approach. <i>Physics Reports</i> , 2000 , 339, 1-77	27.7	5891
42	Boundary value problems for fractional diffusion equations. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2000 , 278, 107-125	3.3	375
41	Kramers' escape problem with anomalous kinetics: non-exponential decay of the survival probability. <i>Chemical Physics Letters</i> , 2000 , 321, 238-242	2.5	32
40	From continuous time random walks to the fractional fokker-planck equation. <i>Physical Review E</i> , 2000 , 61, 132-8	2.4	523
39	Generalized chapman-kolmogorov equation: A unifying approach to the description of anomalous transport in external fields. <i>Physical Review E</i> , 2000 , 62, 6233-45	2.4	77
38	Accelerating Brownian motion: A fractional dynamics approach to fast diffusion. <i>Europhysics Letters</i> , 2000 , 51, 492-498	1.6	56
37	From a Generalized Chapmankolmogorov Equation to the Fractional Kleinkramers Equation Journal of Physical Chemistry B, 2000 , 104, 3851-3857	3.4	95
36	Subdiffusive transport close to thermal equilibrium: from the langevin equation to fractional diffusion. <i>Physical Review E</i> , 2000 , 61, 6308-11	2.4	131
35	Generalized DiffusionAdvection Schemes and Dispersive Sedimentation: A Fractional Approach Journal of Physical Chemistry B, 2000 , 104, 3858-3865	3.4	37
34	APPLICATIONS OF FRACTIONAL CALCULUS TECHNIQUES TO PROBLEMS IN BIOPHYSICS 2000 , 377-427		13
33	Luy flights in external force fields: Langevin and fractional Fokker-Planck equations and their solutions. <i>Physical Review E</i> , 1999 , 59, 2736-2745	2.4	295
32	Hierarchies and logarithmic oscillations in the temporal relaxation patterns of proteins and other complex systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999 , 96, 11085-9	11.5	59
31	Stochastic foundation of normal and anomalous Cattaneo-type transport. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1999 , 268, 454-468	3.3	34
30	Anomalous transport in disordered systems under the influence of external fields. <i>Physica A:</i> Statistical Mechanics and Its Applications, 1999 , 266, 343-350	3.3	68

29	Anomalous Diffusion and Relaxation Close to Thermal Equilibrium: A Fractional Fokker-Planck Equation Approach. <i>Physical Review Letters</i> , 1999 , 82, 3563-3567	7·4	590
28	Deriving fractional Fokker-Planck equations from a generalised master equation. <i>Europhysics Letters</i> , 1999 , 46, 431-436	1.6	230
27	Multiple time scales for dispersive kinetics in early events of peptide folding. <i>Chemical Physics Letters</i> , 1998 , 293, 477-484	2.5	60
26	Anomalous transport in external fields: Continuous time random walks and fractional diffusion equations extended. <i>Physical Review E</i> , 1998 , 58, 1621-1633	2.4	175
25	Fractional diffusion, waiting-time distributions, and Cattaneo-type equations. <i>Physical Review E</i> , 1998 , 57, 6409-6414	2.4	71
24	Generalized Huber kinetics for nonlinear rate processes in disordered systems: Nonlinear analogs of stretched exponential. <i>Physical Review E</i> , 1998 , 57, 6497-6505	2.4	9
23	Bi-asymptotic fractals: Fractals between lower and upper bounds. <i>Journal of Physics A</i> , 1998 , 31, 3839-3	847	23
22	Confined Anomalous Dynamics: A Fractional Diffusion Approach. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 543, 281		2
21	Biased continuous time random walks between parallel plates. <i>Physical Review E</i> , 1997 , 56, 1445-1454	2.4	33
20	Aggregate model of liquids. <i>Journal of Chemical Physics</i> , 1997 , 107, 8697-8705	3.9	56
20 19	Aggregate model of liquids. <i>Journal of Chemical Physics</i> , 1997 , 107, 8697-8705 Fractional diffusion: exact representations of spectral functions. <i>Journal of Physics A</i> , 1997 , 30, 1089-10		56 35
19	Fractional diffusion: exact representations of spectral functions. <i>Journal of Physics A</i> , 1997 , 30, 1089-10	93	35
19 18	Fractional diffusion: exact representations of spectral functions. <i>Journal of Physics A</i> , 1997 , 30, 1089-10 Fractional diffusion and L\(\textstyre{U}\)y stable processes. <i>Physical Review E</i> , 1997 , 55, 99-106	2.4	35
19 18 17	Fractional diffusion: exact representations of spectral functions. <i>Journal of Physics A</i> , 1997 , 30, 1089-10 Fractional diffusion and L\(\textstyre{U}\)y stable processes. <i>Physical Review E</i> , 1997 , 55, 99-106 "Fractional Tuning" of the Riccati Equation. <i>Fractals</i> , 1997 , 05, 597-601 The generalized Cattaneo equation for the description of anomalous transport processes. <i>Journal</i>	2.4	35 144 14
19 18 17 16	Fractional diffusion: exact representations of spectral functions. <i>Journal of Physics A</i> , 1997 , 30, 1089-10 Fractional diffusion and Lūy stable processes. <i>Physical Review E</i> , 1997 , 55, 99-106 "Fractional Tuning" of the Riccati Equation. <i>Fractals</i> , 1997 , 05, 597-601 The generalized Cattaneo equation for the description of anomalous transport processes. <i>Journal of Physics A</i> , 1997 , 30, 7277-7289 Universality classes for asymptotic behavior of relaxation processes in systems with dynamical disorder: Dynamical generalizations of stretched exponential. <i>Journal of Mathematical Physics</i> ,	2.4 3.2	35 144 14 262 32
19 18 17 16	Fractional diffusion: exact representations of spectral functions. <i>Journal of Physics A</i> , 1997 , 30, 1089-10 Fractional diffusion and Lūy stable processes. <i>Physical Review E</i> , 1997 , 55, 99-106 "Fractional Tuning" of the Riccati Equation. <i>Fractals</i> , 1997 , 05, 597-601 The generalized Cattaneo equation for the description of anomalous transport processes. <i>Journal of Physics A</i> , 1997 , 30, 7277-7289 Universality classes for asymptotic behavior of relaxation processes in systems with dynamical disorder: Dynamical generalizations of stretched exponential. <i>Journal of Mathematical Physics</i> , 1996 , 37, 2279-2306	2.4 3.2	35 144 14 262 32

11	Fractional model equation for anomalous diffusion. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1994 , 211, 13-24	3.3	348
10	Introduction to the Theory of LŪy Flights129-162		42
9	Stochastic harmonic trapping of a Levy walk: transport and first-passage dynamics under soft resetting strategies. <i>New Journal of Physics</i> ,	2.9	1
8	First passage dynamics of stochastic motion in heterogeneous media driven by correlated white Gaussian and coloured non-Gaussian noises. <i>Journal of Physics Complexity</i> ,	1.8	3
7	Leveraging large-deviationstatistics to decipher the stochastic properties of measured trajectories. <i>New Journal of Physics</i> ,	2.9	9
6	Serotonergic Axons as Fractional Brownian Motion Paths: Insights into the Self-organization of Regional Densities		1
5	Model of ciprofloxacin subdiffusion inPseudomonas aeruginosabiofilm formed in artificial sputum me	dium	1
4	Characterising stochastic motion in heterogeneous media driven by coloured non-Gaussian noise. <i>Journal of Physics A: Mathematical and Theoretical</i> ,	2	2
3	Adsorption of Lysozyme Into a Charged Confining Pore		1
2	Universality of delay-time averages for financial time series: analytical results, computer simulations, and analysis of historical stock-market prices. <i>Journal of Physics Complexity</i> ,	1.8	4
1	Closed-form multi-dimensional solutions and asymptotic behaviours for subdilisive processes with crossovers: II. Accelerating case. <i>Journal of Physics A: Mathematical and Theoretical</i> ,	2	1