

# Bruce Henry

## List of Publications by Year in descending order

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98  
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citations

257101

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168136

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all docs

100  
docs citations

100  
times ranked

1717  
citing authors

#	ARTICLE	IF	CITATIONS
1	A General Framework for Fractional Order Compartment Models. <i>SIAM Review</i> , 2021, 63, 375-392.	4.2	6
2	Generalized fractional power series solutions for fractional differential equations. <i>Applied Mathematics Letters</i> , 2020, 102, 106107.	1.5	16
3	Time Fractional Fisher-KPP and Fitzhugh-Nagumo Equations. <i>Entropy</i> , 2020, 22, 1035.	1.1	10
4	Intrinsic Discontinuities in Solutions of Evolution Equations Involving Fractional Caputo-Fabrizio and Atangana-Baleanu Operators. <i>Mathematics</i> , 2020, 8, 2023.	1.1	13
5	Numeric solution of advection-diffusion equations by a discrete time random walk scheme. <i>Numerical Methods for Partial Differential Equations</i> , 2020, 36, 680-704.	2.0	4
6	An explicit numerical scheme for solving fractional order compartment models from the master equations of a stochastic process. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2019, 68, 188-202.	1.7	9
7	Time-fractional geometric Brownian motion from continuous time random walks. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2019, 526, 121002.	1.2	7
8	A biofilm and organomineralisation model for the growth and limiting size of ooids. <i>Scientific Reports</i> , 2018, 8, 559.	1.6	24
9	Noise induced aperiodic rotations of particles trapped by a non-conservative force. <i>Chaos</i> , 2018, 28, 043101.	1.0	2
10	Subdiffusive discrete time random walks via Monte Carlo and subordination. <i>Journal of Computational Physics</i> , 2018, 372, 373-384.	1.9	7
11	Integrabilization of time fractional PDEs. <i>Computers and Mathematics With Applications</i> , 2017, 73, 1053-1062.	1.4	2
12	Fractional Order Compartment Models. <i>SIAM Journal on Applied Mathematics</i> , 2017, 77, 430-446.	0.8	35
13	A time-fractional generalised advection equation from a stochastic process. <i>Chaos, Solitons and Fractals</i> , 2017, 102, 175-183.	2.5	16
14	Fractional Euler Limits and their Applications. <i>SIAM Journal on Applied Mathematics</i> , 2017, 77, 447-469.	0.8	5
15	Generalized master equations and fractional Fokker-Planck equations from continuous time random walks with arbitrary initial conditions. <i>Computers and Mathematics With Applications</i> , 2017, 73, 1315-1324.	1.4	6
16	Generalized fractional diffusion equations for subdiffusion in arbitrarily growing domains. <i>Physical Review E</i> , 2017, 96, 042153.	0.8	12
17	Discretization of fractional differential equations by a piecewise constant approximation. <i>Mathematical Modelling of Natural Phenomena</i> , 2017, 12, 23-36.	0.9	5
18	A Fractional-Order Infectivity and Recovery SIR Model. <i>Fractal and Fractional</i> , 2017, 1, 11.	1.6	24

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19	A Fractional Order Recovery SIR Model from a Stochastic Process. <i>Bulletin of Mathematical Biology</i> , 2016, 78, 468-499.	0.9	64
20	Nonconservative dynamics of optically trapped high-aspect-ratio nanowires. <i>Physical Review E</i> , 2016, 93, 022137.	0.8	12
21	A Mathematical Model for the Proliferation, Accumulation and Spread of Pathogenic Proteins Along Neuronal Pathways with Locally Anomalous Trapping. <i>Mathematical Modelling of Natural Phenomena</i> , 2016, 11, 142-156.	0.9	4
22	From stochastic processes to numerical methods: A new scheme for solving reaction subdiffusion fractional partial differential equations. <i>Journal of Computational Physics</i> , 2016, 307, 508-534.	1.9	24
23	A fractional-order infectivity SIR model. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2016, 452, 86-93.	1.2	62
24	Fractal Dimension Analysis of Transient Visual Evoked Potentials: Optimisation and Applications. <i>PLoS ONE</i> , 2016, 11, e0161565.	1.1	5
25	Patterning of the MinD cell division protein in cells of arbitrary shape can be predicted using a heuristic dispersion relation. <i>AIMS Biophysics</i> , 2016, 3, 119-145.	0.3	4
26	Predicting First Traversal Times for Virions and Nanoparticles in Mucus with Slowed Diffusion. <i>Biophysical Journal</i> , 2015, 109, 164-172.	0.2	13
27	Generalized Continuous Time Random Walks, Master Equations, and Fractional Fokker-Planck Equations. <i>SIAM Journal on Applied Mathematics</i> , 2015, 75, 1445-1468.	0.8	26
28	A discrete time random walk model for anomalous diffusion. <i>Journal of Computational Physics</i> , 2015, 293, 53-69.	1.9	15
29	Anomalous dynamic behaviour of optically trapped high aspect ratio nanowires. , 2014, , .		0
30	Pattern formation on networks with reactions: A continuous-time random-walk approach. <i>Physical Review E</i> , 2013, 87, .	0.8	30
31	Turing Patterns from Dynamics of Early HIV Infection. <i>Bulletin of Mathematical Biology</i> , 2013, 75, 774-795.	0.9	59
32	Continuous-time random walks on networks with vertex- and time-dependent forcing. <i>Physical Review E</i> , 2013, 88, 022811.	0.8	12
33	Continuous Time Random Walks with Reactions Forcing and Trapping. <i>Mathematical Modelling of Natural Phenomena</i> , 2013, 8, 17-27.	0.9	59
34	Fractional Cable Equation Models for Anomalous Electrodiffusion in Nerve Cells: Finite Domain Solutions. <i>SIAM Journal on Applied Mathematics</i> , 2011, 71, 1168-1203.	0.8	59
35	Lagging and leading coupled continuous time random walks, renewal times and their joint limits. <i>Stochastic Processes and Their Applications</i> , 2011, 121, 324-336.	0.4	50
36	Continuous-time random walks that alter environmental transport properties. <i>Physical Review E</i> , 2011, 84, 061146.	0.8	9

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37	Fractional Fokker-Planck Equations for Subdiffusion with Space- and Time-Dependent Forces. <i>Physical Review Letters</i> , 2010, 105, 170602.	2.9	114
38	Fractional chemotaxis diffusion equations. <i>Physical Review E</i> , 2010, 81, 051102.	0.8	61
39	Dynamics of chromatic visual system processing differ in complexity between children and adults. <i>Journal of Vision</i> , 2009, 9, 22-22.	0.1	9
40	The Electrotonic Structure of Pyramidal Neurons Contributing to Prefrontal Cortical Circuits in Macaque Monkeys Is Significantly Altered in Aging. <i>Cerebral Cortex</i> , 2009, 19, 2248-2268.	1.6	82
41	Fractional cable equation models for anomalous electrodiffusion in nerve cells: infinite domain solutions. <i>Journal of Mathematical Biology</i> , 2009, 59, 761-808.	0.8	123
42	Fractional Cable Models for Spiny Neuronal Dendrites. <i>Physical Review Letters</i> , 2008, 100, 128103.	2.9	158
43	The correlation dimension: A useful objective measure of the transient visual evoked potential?. <i>Journal of Vision</i> , 2008, 8, 6.	0.1	30
44	Anomalous subdiffusion with multispecies linear reaction dynamics. <i>Physical Review E</i> , 2008, 77, 021111.	0.8	77
45	Chemical diffusion in amphoteric oxide semiconductors. <i>Advances in Applied Ceramics</i> , 2007, 106, 77-81.	0.6	5
46	Turing pattern formation with fractional diffusion and fractional reactions. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 065115.	0.7	40
47	Functionally relevant measures of spatial complexity in neuronal dendritic arbors. <i>Journal of Theoretical Biology</i> , 2006, 238, 505-526.	0.8	21
48	Anomalous diffusion with linear reaction dynamics: From continuous time random walks to fractional reaction-diffusion equations. <i>Physical Review E</i> , 2006, 74, 031116.	0.8	210
49	The accuracy and stability of an implicit solution method for the fractional diffusion equation. <i>Journal of Computational Physics</i> , 2005, 205, 719-736.	1.9	464
50	Statistical physics and stromatolite growth: new perspectives on an ancient dilemma. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2005, 350, 6-11.	1.2	21
51	Turing pattern formation in fractional activator-inhibitor systems. <i>Physical Review E</i> , 2005, 72, 026101.	0.8	98
52	Estimating chromatic contrast thresholds from the transient visual evoked potential. <i>Vision Research</i> , 2005, 45, 2367-2383.	0.7	11
53	A case for biotic morphogenesis of coniform stromatolites. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2004, 337, 319-326.	1.2	56
54	Mathematical and Image Analysis of Stromatolite Morphogenesis. <i>Mathematical Geosciences</i> , 2003, 35, 789-803.	0.9	13

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55	Random walks on finite lattice tubes. <i>Physical Review E</i> , 2003, 68, 016112.	0.8	10
56	MULTIFRACTAL MEASURES IN FRACTIONAL ITERATIVE MAPS. <i>Fractals</i> , 2002, 10, 229-233.	1.8	1
57	Exact solution for random walks on the triangular lattice with absorbing boundaries. <i>Journal of Physics A</i> , 2002, 35, 5951-5959.	1.6	9
58	Existence of Turing Instabilities in a Two-Species Fractional Reaction-Diffusion System. <i>SIAM Journal on Applied Mathematics</i> , 2002, 62, 870-887.	0.8	171
59	Deterministic diffusion generated by a chaotic map with intrinsic bias. <i>Chaos, Solitons and Fractals</i> , 2002, 14, 681-687.	2.5	1
60	Gene Stanley, the n-vector model and random walks with absorbing boundaries. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2002, 314, 77-82.	1.2	3
61	Chaotic features in fractional iterative maps. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2002, 315, 40-44.	1.2	0
62	Deterministic KPZ model for stromatolite laminae. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2000, 282, 123-136.	1.2	32
63	Fractional reaction-diffusion. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2000, 276, 448-455.	1.2	271
64	Continuum model for radial interface growth. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1998, 260, 11-19.	1.2	13
65	Mean-field analysis of Williams-Bjerknes-type growth. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1998, 256, 295-311.	1.2	3
66	Resonance energy transfers in the induction phenomenon in quartic Fermi-Pasta-Ulam chains. <i>Physical Review E</i> , 1998, 58, 3045-3054.	0.8	6
67	Surface width scaling in noise reduced Eden clusters. <i>Physical Review E</i> , 1998, 58, 4023-4026.	0.8	3
68	Statistical surface distributions for constant-energy ensembles. <i>Canadian Journal of Physics</i> , 1997, 75, 539-547.	0.4	1
69	Who cares what's new?. <i>Nature</i> , 1997, 387, 337-337.	13.7	3
70	Growth and form of zero-noise diffusion-limited-aggregation on the cubic lattice. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1996, 233, 905-918.	1.2	2
71	PATTERN FORMATION IN AN ETCHED RADIAL HELE SHAW CELL. <i>Fractals</i> , 1996, 04, 149-159.	1.8	2
72	New equipartition results for normal mode energies of anharmonic chains. <i>Journal of Statistical Physics</i> , 1995, 78, 1039-1053.	0.5	2

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73	Comparative study of large-scale Laplacian growth patterns. <i>Physical Review E</i> , 1995, 51, 807-810.	0.8	6
74	From dynamics to statistical mechanics in the HÄ©non-Heiles model: Dynamics. <i>Physical Review E</i> , 1994, 49, 2549-2558.	0.8	5
75	Diffusion-limited aggregation with Eden growth surface kinetics. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1994, 203, 566-582.	1.2	3
76	Growth and form in the zero-noise limit of discrete Laplacian growth processes with inherent surface tension. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1993, 193, 553-574.	1.2	8
77	Tip lengths and whiskering in noise-reduced diffusion-limited aggregation. <i>Journal of Physics A</i> , 1993, 26, 3431-3440.	1.6	2
78	Branching in the zero-noise limit of discrete Laplacian growth processes. <i>Physical Review A</i> , 1992, 45, 4180-4183.	1.0	14
79	Growth and form in the zero-noise limit of discrete Laplacian growth processes with inherent surface tension. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1992, 187, 551-574.	1.2	11
80	Fractal dimensions of zero-noise diffusion-limited aggregation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1992, 191, 113-116.	1.2	6
81	Limits to Eden growth in two and three dimensions. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1991, 157, 229-236.	0.9	29
82	Perturbative calculation of superperiod recurrence times in nonlinear chains. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1991, 159, 21-27.	0.9	7
83	Exact solutions for restricted walks with applications to polymers. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1991, 153, 35-39.	0.9	0
84	Recurrence times in cubic and quartic Fermi-Pasta-Ulam chains: A shifted-frequency perturbation treatment. <i>Physical Review A</i> , 1991, 44, 6364-6374.	1.0	16
85	Chaos in a chain of six particles with fixed ends (a 4+2 chain). <i>Physical Review A</i> , 1991, 44, 4876-4884.	1.0	3
86	Integrability of Low Particle-number Models for Solids. <i>Australian Journal of Physics</i> , 1991, 44, 1.	0.6	0
87	Numerical ensemble study of ergodic properties of the quartic Fermi-Pasta-Ulam chain. II. Distribution and correlation functions. <i>Physical Review A</i> , 1989, 40, 392-403.	1.0	2
88	Numerical ensemble study of ergodic properties of the quartic Fermi-Pasta-Ulam chain. <i>Physical Review A</i> , 1988, 38, 2594-2604.	1.0	9
89	Reversible approach to statistical equilibrium in a nonlinear chain: An ensemble study. <i>Physica D: Nonlinear Phenomena</i> , 1987, 28, 49-79.	1.3	13
90	Numerical ensemble study of the approach to equilibrium of an anharmonic chain. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1986, 119, 215-220.	0.9	7

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91	Dynamics and statistical mechanics of a diatomic $\ddot{H}$ 4 chain. Solid State Communications, 1985, 55, 587-592.	0.9	4
92	Dynamics of a Nonlinear Diatomic Chain. III. A Molecular Dynamics Study. Australian Journal of Physics, 1985, 38, 191.	0.6	2
93	Dynamics of a Nonlinear Diatomic Chain. II. Thermodynamic Properties. Australian Journal of Physics, 1985, 38, 171.	0.6	5
94	Classical freeâ€energy densities for harmonic chains: A pedagogic application of the transfer integral technique. American Journal of Physics, 1984, 52, 1016-1020.	0.3	0
95	Polarization shift of spectral lines in high density plasmas. Optics Communications, 1983, 44, 185-187.	1.0	4
96	Spectral line limiting and polarization shift in plasmas of high particle and energy density. Laser and Particle Beams, 1983, 1, 11-28.	0.4	7
97	Dynamics of a Nonlinear Diatomic Chain. Australian Journal of Physics, 1983, 36, 339.	0.6	10
98	Nonlinear excitations in a diatomic chain. Solid State Communications, 1982, 44, 511-514.	0.9	7