Evelyn Buckwar

List of Publications by Year
in descending order

42 papers	1,389 citations	18 h-index 430754	37 g-index 330025
46 all docs	46 docs citations	46 times ranked	579 citing authors

#	Article	IF	Citations
1	Invariance of a Partial Differential Equation of Fractional Order under the Lie Group of Scaling Transformations. Journal of Mathematical Analysis and Applications, 1998, 227, 81-97.	0.5	221
2	Exponential stability in p-th mean of solutions, and of convergent Euler-type solutions, of stochastic delay differential equations. Journal of Computational and Applied Mathematics, 2005, 184, 404-427.	1.1	163
3	Introduction to the numerical analysis of stochastic delay differential equations. Journal of Computational and Applied Mathematics, 2000, 125, 297-307.	1.1	150
4	Numerical Analysis of Explicit One-Step Methods for Stochastic Delay Differential Equations. LMS Journal of Computation and Mathematics, 2000, 3, 315-335.	0.9	129
5	Multistep methods for SDEs and their application to problems with small noise. SIAM Journal on Numerical Analysis, 2006, 44, 779-803.	1.1	70
6	An exact stochastic hybrid model of excitable membranes including spatio-temporal evolution. Journal of Mathematical Biology, 2011, 63, 1051-1093.	0.8	65
7	Towards a Systematic Linear Stability Analysis of Numerical Methods for Systems of Stochastic Differential Equations. SIAM Journal on Numerical Analysis, 2010, 48, 298-321.	1.1	61
8	A comparative linear mean-square stability analysis of Maruyama- and Milstein-type methods. Mathematics and Computers in Simulation, 2011, 81, 1110-1127.	2.4	52
9	A structural analysis of asymptotic mean-square stability for multi-dimensional linear stochastic differential systems. Applied Numerical Mathematics, 2012, 62, 842-859.	1.2	41
10	Asymptotic Mean-Square Stability of Two-Step Methods for Stochastic Ordinary Differential Equations. BIT Numerical Mathematics, 2006, 46, 261-282.	1.0	30
11	Weak approximation of stochastic differential delay equations. IMA Journal of Numerical Analysis, 2005, 25, 57-86.	1.5	26
12	NOISE-SENSITIVITY IN MACHINE TOOL VIBRATIONS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2006, 16, 2407-2416.	0.7	26
13	Multi-Step Maruyama Methods for Stochastic Delay Differential Equations. Stochastic Analysis and Applications, 2007, 25, 933-959.	0.9	25
14	Laws of Large Numbers and Langevin Approximations for Stochastic Neural Field Equations. Journal of Mathematical Neuroscience, 2013, 3, 1.	2.4	24
15	Weak Convergence of the Euler Scheme for Stochastic Differential Delay Equations. LMS Journal of Computation and Mathematics, 2008, 11, 60-99.	0.9	20
16	Stochastic Runge–Kutta Methods for Itô SODEs with Small Noise. SIAM Journal of Scientific Computing, 2010, 32, 1789-1808.	1.3	20
17	Runge–Kutta methods for jump–diffusion differential equations. Journal of Computational and Applied Mathematics, 2011, 236, 1155-1182.	1.1	20
18	One-step approximations for stochastic functional differential equations. Applied Numerical Mathematics, 2006, 56, 667-681.	1.2	19

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19	Non-normal drift structures and linear stability analysis of numerical methods for systems of stochastic differential equations. Computers and Mathematics With Applications, 2012, 64, 2282-2293.	1.4	19
20	Numerical Solution of the Neural Field Equation in the Two-Dimensional Case. SIAM Journal of Scientific Computing, 2015, 37, B962-B979.	1.3	19
21	Almost sure asymptotic stability analysis of the Î¸-Maruyama method applied to a test system with stabilising and destabilising stochastic perturbations. LMS Journal of Computation and Mathematics, 2012, 15, 71-83.	0.9	17
22	Sufficient conditions for polynomial asymptotic behaviour of the stochastic pantograph equation. , 0, , .		14
23	Asymptotic and Transient Mean-Square Properties of Stochastic Systems Arising in Ecology, Fluid Dynamics, and System Control. SIAM Journal on Applied Mathematics, 2014, 74, 411-433.	0.8	13
24	Spectral density-based and measure-preserving ABC for partially observed diffusion processes. An illustration on Hamiltonian SDEs. Statistics and Computing, 2020, 30, 627-648.	0.8	13
25	A Stochastic Version of the Jansen and Rit Neural Mass Model: Analysis and Numerics. Journal of Mathematical Neuroscience, 2017, 7, 8.	2.4	12
26	On Two-step Schemes for SDEs with Small Noise. Proceedings in Applied Mathematics and Mechanics, 2004, 4, 15-18.	0.2	11
27	Improved linear multi-step methods for stochastic ordinary differential equations. Journal of Computational and Applied Mathematics, 2007, 205, 912-922.	1.1	11
28	THE NUMERICAL STABILITY OF STOCHASTIC ORDINARY DIFFERENTIAL EQUATIONS WITH ADDITIVE NOISE. Stochastics and Dynamics, 2011, 11, 265-281.	0.6	11
29	The âŠ•Maruyama scheme for stochastic functional differential equations with distributed memory term *. Monte Carlo Methods and Applications, 2004, 10, .	0.3	9
30	A splitting method for SDEs with locally Lipschitz drift: Illustration on the FitzHugh-Nagumo model. Applied Numerical Mathematics, 2022, 179, 191-220.	1.2	9
31	A Constructive Comparison Technique for Determining the Asymptotic Behaviour of Linear Functional Differential Equations with Unbounded Delay. Differential Equations and Dynamical Systems, 2010, 18, 271-301.	0.5	8
32	Stochastic Runge-Kutta methods with deterministic high order for ordinary differential equations. BIT Numerical Mathematics, 2013, 53, 617-639.	1.0	8
33	Splitting Integrators for the Stochastic Landau--Lifshitz Equation. SIAM Journal of Scientific Computing, 2016, 38, A1788-A1806.	1.3	8
34	Qualitative properties of different numerical methods for the inhomogeneous geometric Brownian motion. Journal of Computational and Applied Mathematics, 2022, 406, 113951.	1.1	8
35	ON HALANAY-TYPE ANALYSIS OF EXPONENTIAL STABILITY FOR THE Î¸-MARUYAMA METHOD FOR STOCHASTIC DELAY DIFFERENTIAL EQUATIONS. Stochastics and Dynamics, 2005, 05, 201-209.	0.6	7
36	Existence and uniqueness of solutions of Abel integral equations with power-law non-linearities. Nonlinear Analysis: Theory, Methods & Applications, 2005, 63, 88-96.	0.6	6

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37	Weak stochastic Runge–Kutta Munthe-Kaas methods for finite spin ensembles. Applied Numerical Mathematics, 2017, 118, 50-63.	1.2	6
38	Exponential mean-square stability properties of stochastic linear multistep methods. Advances in Computational Mathematics, 2021, 47, 1.	0.8	6
39	Numerical Investigation of the Two-Dimensioaln Neural Field Equation with Delay. , 2015, , .		3
40	An importance sampling technique in Monte Carlo methods for SDEs with a.s. stable and mean-square unstable equilibrium. Journal of Computational and Applied Mathematics, 2017, 316, 3-14.	1.1	3
41	Stochastic Runge-Kutta Methods with Deterministic High Order for Ordinary Differential Equations. , 2011, , .		0
42	A note on the analysis of asymptotic mean-square stability properties for systems of linear stochastic delay differential equations. Discrete and Continuous Dynamical Systems - Series B, 2013, 18, 1521-1531.	0.5	0