Hugo A De La Cruz

List of Publications by Year
in descending order

		1306789	1199166
19 papers	154 citations	7 h-index	12 g-index
19 all docs	19 docs citations	19 times ranked	87 citing authors

#	Article	IF	Citations
1	An explicit numerical scheme for the computer simulation of the stochastic transport equation. Communications in Nonlinear Science and Numerical Simulation, 2022, 110, 106378.	1.7	0
2	Steady-state density preserving method for stochastic mechanical systems. European Physical Journal Plus, 2021, 136, 1.	1.2	2
3	Exact pathwise simulation of multi-dimensional Ornstein–Uhlenbeck processes. Applied Mathematics and Computation, 2020, 366, 124734.	1.4	0
4	Stabilized explicit methods for the approximation of stochastic systems driven by small additive noises. Chaos, Solitons and Fractals, 2020, 140, 110195.	2.5	5
5	Efficient computation of phi-functions in exponential integrators. Journal of Computational and Applied Mathematics, 2020, 374, 112758.	1.1	3
6	On the oscillatory behavior of coupled stochastic harmonic oscillators driven by random forces. Statistics and Probability Letters, 2019, 146, 85-89.	0.4	2
7	Locally Linearized methods for the simulation of stochastic oscillators driven by random forces. BIT Numerical Mathematics, 2017, 57, 123-151.	1.0	31
8	Local Linearization–Runge–Kutta methods: A class of A-stable explicit integrators for dynamical systems. Mathematical and Computer Modelling, 2013, 57, 720-740.	2.0	13
9	On the numerical integration of a random integral equation arising in the simulation of stochastic transport equations. , 2013, , .		0
10	Convergence rate of strong Local Linearization schemes for stochastic differential equations with additive noise. BIT Numerical Mathematics, 2012, 52, 357-382.	1.0	14
11	High order local linearization methods: An approach for constructing A-stable explicit schemes for stochastic differential equations with additive noise. BIT Numerical Mathematics, 2010, 50, 509-539.	1.0	17
12	A higher order local linearization method for solving ordinary differential equations. Applied Mathematics and Computation, 2007, 185, 197-212.	1.4	23
13	Numerical simulation of nonlinear dynamical systems driven by commutative noise. Journal of Computational Physics, 2007, 226, 1219-1233.	1.9	8
14	Local Linearization-Runge Kutta (LLRK) Methods for Solving Ordinary Differential Equations. Lecture Notes in Computer Science, 2006, , 132-139.	1.0	5
15	The Local Linearization Method for Numerical Integration of Random Differential Equations. BIT Numerical Mathematics, 2005, 45, 1-14.	1.0	31
16	A higher order and stable method for the numerical integration of Random Differential Equations. , 0, , .		0
17	A numerical method for the semilinear stochastic transport equation. , 0, , .		0
18	An explicit numerical method for random differential equations driven by diffusion-type noises. , 0, , .		0

#	Article	IF	Citations
19	Numerical and Computational Analysis of models for Stochasti activity of neurons. , 0, , .		0