

Kristian Debrabant

List of Publications by Year in descending order

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papers

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35
all docs

35
docs citations

35
times ranked

262
citing authors

#	ARTICLE	IF	CITATIONS
1	Lawson schemes for highly oscillatory stochastic differential equations and conservation of invariants. BIT Numerical Mathematics, 2022, 62, 1121-1147.	1.0	2
2	Backward differentiation formula finite difference schemes for diffusion equations with an obstacle term. IMA Journal of Numerical Analysis, 2021, 41, 900-934.	1.5	2
3	Runge-Kutta Lawson schemes for stochastic differential equations. BIT Numerical Mathematics, 2021, 61, 381-409.	1.0	7
4	The Cost-Effectiveness of a COVID-19 Vaccine in a Danish Context. Clinical Drug Investigation, 2021, 41, 975-988.	1.1	25
5	High order numerical integrators for single integrand Stratonovich SDEs. Applied Numerical Mathematics, 2020, 158, 264-270.	1.2	4
6	Study of micro-macro acceleration schemes for linear slow-fast stochastic differential equations with additive noise. BIT Numerical Mathematics, 2020, 60, 959-998.	1.0	0
7	Weak antithetic MLMC estimation of SDEs with the Milstein scheme for low-dimensional Wiener processes. Applied Mathematics Letters, 2019, 91, 22-27.	1.5	2
8	Stochastic B-Series and Order Conditions for Exponential Integrators. Lecture Notes in Computational Science and Engineering, 2019, , 419-427.	0.1	4
9	Parametric Model Reduction via Interpolating Orthonormal Bases. Lecture Notes in Computational Science and Engineering, 2019, , 683-691.	0.1	1
10	Analysis of multilevel Monte Carlo path simulation using the Milstein discretisation. Discrete and Continuous Dynamical Systems - Series B, 2019, 24, 3881-3903.	0.5	3
11	General order conditions for stochastic partitioned Runge-Kutta methods. BIT Numerical Mathematics, 2018, 58, 257-280.	1.0	5
12	Robust optimization with applications to design of context specific robot solutions. Robotics and Computer-Integrated Manufacturing, 2018, 53, 162-177.	6.1	6
13	Carbon oxidation and bioirrigation in sediments along a Skagerrak-Kattegat-Belt Sea depth transect. Marine Ecology - Progress Series, 2018, 604, 33-50.	0.9	13
14	Cheap arbitrary high order methods for single integrand SDEs. BIT Numerical Mathematics, 2017, 57, 153-168.	1.0	7
15	A Micro-Macro Acceleration Method for the Monte Carlo Simulation of Stochastic Differential Equations. SIAM Journal on Numerical Analysis, 2017, 55, 2745-2786.	1.1	14
16	Robust optimization of robotic pick and place operations for deformable objects through simulation. , 2016, , .		7
17	On the Acceleration of the Multi-Level Monte Carlo Method. Journal of Applied Probability, 2015, 52, 307-322.	0.4	2
18	On the Acceleration of the Multi-Level Monte Carlo Method. Journal of Applied Probability, 2015, 52, 307-322.	0.4	8

#	ARTICLE	IF	CITATIONS
19	On asymptotic global error estimation and control of finite difference solutions for semilinear parabolic equations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 288, 110-126.	3.4	3
20	On the global error of special Runge-Kutta methods applied to linear Differential Algebraic Equations. <i>Applied Mathematics Letters</i> , 2015, 39, 53-59.	1.5	2
21	Derivative-free weak approximation methods for stochastic differential equations in finance. <i>Interdisciplinary Mathematical Sciences</i> , 2013, , 299-315.	0.4	0
22	Semi-Lagrangian schemes for parabolic equations. <i>Interdisciplinary Mathematical Sciences</i> , 2013, , 279-297.	0.4	0
23	Semi-Lagrangian schemes for linear and fully non-linear diffusion equations. <i>Mathematics of Computation</i> , 2012, 82, 1433-1462.	1.1	71
24	B-series analysis of iterated Taylor methods. <i>BIT Numerical Mathematics</i> , 2011, 51, 529-553.	1.0	4
25	Composition of stochastic B-series with applications to implicit Taylor methods. <i>Applied Numerical Mathematics</i> , 2011, 61, 501-511.	1.2	7
26	Runge-Kutta methods for third order weak approximation of SDEs with multidimensional additive noise. <i>BIT Numerical Mathematics</i> , 2010, 50, 541-558.	1.0	20
27	Stochastic Taylor Expansions: Weight Functions of B-Series Expressed as Multiple Integrals. <i>Stochastic Analysis and Applications</i> , 2010, 28, 293-302.	0.9	5
28	Diagonally drift-implicit Runge-Kutta methods of weak order one and two for Itô SDEs and stability analysis. <i>Applied Numerical Mathematics</i> , 2009, 59, 595-607.	1.2	26
29	Families of efficient second order Runge-Kutta methods for the weak approximation of Itô stochastic differential equations. <i>Applied Numerical Mathematics</i> , 2009, 59, 582-594.	1.2	30
30	B-series Analysis of Stochastic Runge-Kutta Methods That Use an Iterative Scheme to Compute Their Internal Stage Values. <i>SIAM Journal on Numerical Analysis</i> , 2009, 47, 181-203.	1.1	45
31	Classification of stochastic Runge-Kutta methods for the weak approximation of stochastic differential equations. <i>Mathematics and Computers in Simulation</i> , 2008, 77, 408-420.	2.4	29
32	Continuous weak approximation for stochastic differential equations. <i>Journal of Computational and Applied Mathematics</i> , 2008, 214, 259-273.	1.1	9
33	Continuous Runge-Kutta Methods for Stratonovich Stochastic Differential Equations. , 2008, , 237-250.		0
34	Convergence of Runge-Kutta methods applied to linear partial differential-algebraic equations. <i>Applied Numerical Mathematics</i> , 2005, 53, 213-229.	1.2	19
35	On quasi-linear PDAEs with convection: Applications, indices, numerical solution. <i>Applied Numerical Mathematics</i> , 2002, 42, 297-314.	1.2	14