# Kristian Debrabant

List of Publications by Year
in descending order



| 35 | 396 | 840585 11 | 794469 19 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 35 | 35 | 35 | 262 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Semi-Lagrangian schemes for linear and fully non-linear diffusion equations. Mathematics of Computation, 2012, 82, 1433-1462. | 1.1 | 71 |
| 2 | Bâ€“Series Analysis of Stochastic Rungeâ€“Kutta Methods That Use an Iterative Scheme to Compute Their Internal Stage Values. SIAM Journal on Numerical Analysis, 2009, 47, 181-203. | 1.1 | 45 |
| 3 | Families of efficient second order Rungeâ€“Kutta methods for the weak approximation of ItÃ´ stochastic differential equations. Applied Numerical Mathematics, 2009, 59, 582-594. | 1.2 | 30 |
| 4 | Classification of stochastic Rungeâ€“Kutta methods for the weak approximation of stochastic differential equations. Mathematics and Computers in Simulation, 2008, 77, 408-420. | 2.4 | 29 |
| 5 | Diagonally drift-implicit Rungeâ€“Kutta methods of weak order one and two for ItÃ´ SDEs and stability analysis. Applied Numerical Mathematics, 2009, 59, 595-607. | 1.2 | 26 |
| 6 | The Cost-Effectiveness of a COVID-19 Vaccine in a Danish Context. Clinical Drug Investigation, 2021, 41, 975-988. | 1.1 | 25 |
| 7 | Runge-Kutta methods for third order weak approximation of SDEs with multidimensional additive noise. BIT Numerical Mathematics, 2010, 50, 541-558. | 1.0 | 20 |
| 8 | Convergence of Rungeâ€“Kutta methods applied to linear partial differential-algebraic equations. Applied Numerical Mathematics, 2005, 53, 213-229. | 1.2 | 19 |
| 9 | On quasi-linear PDAEs with convection: Applications, indices, numerical solution. Applied Numerical Mathematics, 2002, 42, 297-314. | 1.2 | 14 |
| 10 | 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 |
| 11 | 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 |
| 12 | Continuous weak approximation for stochastic differential equations. Journal of Computational and Applied Mathematics, 2008, 214, 259-273. | 1.1 | 9 |
| 13 | On the Acceleration of the Multi-Level Monte Carlo Method. Journal of Applied Probability, 2015, 52, 307-322. | 0.4 | 8 |
| 14 | Composition of stochastic B-series with applications to implicit Taylor methods. Applied Numerical Mathematics, 2011, 61, 501-511. | 1.2 | 7 |
| 15 | Robust optimization of robotic pick and place operations for deformable objects through simulation. , 2016, , . | | 7 |
| 16 | Cheap arbitrary high order methods for single integrand SDEs. BIT Numerical Mathematics, 2017, 57, 153-168. | 1.0 | 7 |
| 17 | Rungeâ€“Kutta Lawson schemes for stochastic differential equations. BIT Numerical Mathematics, 2021, 61, 381-409. | 1.0 | 7 |
| 18 | Robust optimization with applications to design of context specific robot solutions. Robotics and Computer-Integrated Manufacturing, 2018, 53, 162-177. | 6.1 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Stochastic Taylor Expansions: Weight Functions of B-Series Expressed as Multiple Integrals. Stochastic Analysis and Applications, 2010, 28, 293-302. | 0.9 | 5 |
| 20 | General order conditions for stochastic partitioned Rungeâ€“Kutta methods. BIT Numerical Mathematics, 2018, 58, 257-280. | 1.0 | 5 |
| 21 | B-series analysis of iterated Taylor methods. BIT Numerical Mathematics, 2011, 51, 529-553. | 1.0 | 4 |
| 22 | Stochastic B-Series and Order Conditions for Exponential Integrators. Lecture Notes in Computational Science and Engineering, 2019, , 419-427. | 0.1 | 4 |
| 23 | High order numerical integrators for single integrand Stratonovich SDEs. Applied Numerical Mathematics, 2020, 158, 264-270. | 1.2 | 4 |
| 24 | On asymptotic global error estimation and control of finite difference solutions for semilinear parabolic equations. Computer Methods in Applied Mechanics and Engineering, 2015, 288, 110-126. | 3.4 | 3 |
| 25 | 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 |
| 26 | On the Acceleration of the Multi-Level Monte Carlo Method. Journal of Applied Probability, 2015, 52, 307-322. | 0.4 | 2 |
| 27 | On the global error of special Rungeâ€“Kutta methods applied to linear Differential Algebraic Equations. Applied Mathematics Letters, 2015, 39, 53-59. | 1.5 | 2 |
| 28 | 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 |
| 29 | 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 |
| 30 | Lawson schemes for highly oscillatory stochastic differential equations and conservation of invariants. BIT Numerical Mathematics, 2022, 62, 1121-1147. | 1.0 | 2 |
| 31 | Parametric Model Reduction via Interpolating Orthonormal Bases. Lecture Notes in Computational Science and Engineering, 2019, , 683-691. | 0.1 | 1 |
| 32 | Derivative-free weak approximation methods for stochastic differential equations in finance. Interdisciplinary Mathematical Sciences, 2013, , 299-315. | 0.4 | 0 |
| 33 | Study of microâ€“macro acceleration schemes for linear slow-fast stochastic differential equations with additive noise. BIT Numerical Mathematics, 2020, 60, 959-998. | 1.0 | 0 |
| 34 | Continuous Runge-Kutta Methods for Stratonovich Stochastic Differential Equations. , 2008, , 237-250. | | 0 |
| 35 | Semi-Lagrangian schemes for parabolic equations. Interdisciplinary Mathematical Sciences, 2013, , 279-297. | 0.4 | 0 |