Marlis Hochbruck

List of Publications by Year
in descending order

32	3,115	566801 15	476904 29
papers	citations	h-index	g-index

33	33	33	1076
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Error analysis for space discretizations of quasilinear wave-type equations. IMA Journal of Numerical Analysis, 2022, 42, 1963-1990.	1.5	7
2	Error analysis of a fully discrete discontinuous Galerkin alternating direction implicit discretization of a class of linear wave-type problems. Numerische Mathematik, 2022, 150, 893-927.	0.9	6
3	Exponential Integrators for Quasilinear Wave-Type Equations. SIAM Journal on Numerical Analysis, 2022, 60, 1472-1493.	1.1	1
4	On averaged exponential integrators for semilinear wave equations with solutions of low-regularity. SN Partial Differential Equations and Applications, 2021, 2, 1.	0.3	2
5	An implicitâ€“explicit time discretization scheme for second-order semilinear wave equations with application to dynamic boundary conditions. Numerische Mathematik, 2021, 147, 869-899.	0.9	6
6	On the convergence of Lawson methods for semilinear stiff problems. Numerische Mathematik, 2020, 145, 553-580.	0.9	5
7	Error Analysis of Discontinuous Galerkin Discretizations of a Class of Linear Wave-type Problems. Trends in Mathematics, 2020, , 197-218.	0.1	5
8	Unified error analysis for nonconforming space discretizations of wave-type equations. IMA Journal of Numerical Analysis, 2019, 39, 1206-1245.	1.5	13
9	Nonlinear Evolution Equations: Analysis and Numerics. Oberwolfach Reports, 2019, 16, 305-405.	0.0	0
10	Heterogeneous Multiscale Method for Maxwell's Equations. Multiscale Modeling and Simulation, 2019, 17, 1147-1171.	0.6	5
11	On the Efficiency of the Peacemanâ€“Rachford ADI-dG Method for Wave-Type Problems. Lecture Notes in Computational Science and Engineering, 2019, , 135-144.	0.1	4
12	Closing the gap between trigonometric integrators and splitting methods for highly oscillatory differential equations. IMA Journal of Numerical Analysis, 2018, 38, 57-74.	1.5	9
13	Error analysis of implicit Rungeâ€“Kutta methods for quasilinear hyperbolic evolution equations. Numerische Mathematik, 2018, 138, 557-579.	0.9	6
14	Upwind discontinuous Galerkin space discretization and locally implicit time integration for linear Maxwellâ€™s equations. Mathematics of Computation, 2018, 88, 1121-1153.	1.1	4
15	Error analysis of implicit Euler methods for quasilinear hyperbolic evolution equations. Numerische Mathematik, 2017, 135, 547-569.	0.9	13
16	Error Analysis of a Second-Order Locally Implicit Method for Linear Maxwell's Equations. SIAM Journal on Numerical Analysis, 2016, 54, 3167-3191.	1.1	25
17	A Short Course on Exponential Integrators. Series in Contemporary Applied Mathematics, 2015, , 28-49.	0.8	5
18	Efficient multiple time-stepping algorithms of higher order. Journal of Computational Physics, 2015, 285, 133-148.	1.9	15

#	Article	IF	Citations
19	Efficient time integration for discontinuous Galerkin approximations of linear wave equations. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2015, 95, 237-259.	0.9	36
20	Implicit Runge--Kutta Methods and Discontinuous Galerkin Discretizations for Linear Maxwell's Equations. SIAM Journal on Numerical Analysis, 2015, 53, 485-507.	1.1	25
21	Convergence of an ADI splitting for Maxwellâ€™s equations. Numerische Mathematik, 2015, 129, 535-561.	0.9	34
22	Exponential multistep methods of Adams-type. BIT Numerical Mathematics, 2011, 51, 889-908.	1.0	62
23	Exponential integrators. Acta Numerica, 2010, 19, 209-286.	6.3	775
24	Exponential Rosenbrock-Type Methods. SIAM Journal on Numerical Analysis, 2009, 47, 786-803.	1.1	172
25	Preconditioning Lanczos Approximations to the Matrix Exponential. SIAM Journal of Scientific Computing, 2006, 27, 1438-1457.	1.3	158
26	Error analysis of exponential integrators for oscillatory second-order differential equations. Journal of Physics A, 2006, 39, 5495-5507.	1.6	74
27	Exponential Rungeâ€“Kutta methods for parabolic problems. Applied Numerical Mathematics, 2005, 53, 323-339.	1.2	136
28	Explicit Exponential Runge--Kutta Methods for Semilinear Parabolic Problems. SIAM Journal on Numerical Analysis, 2005, 43, 1069-1090.	1.1	289
29	A Gautschi-type method for oscillatory second-order differential equations. Numerische Mathematik, 1999, 83, 403-426.	0.9	204
30	Exponential Integrators for Large Systems of Differential Equations. SIAM Journal of Scientific Computing, 1998, 19, 1552-1574.	1.3	398
31	On Krylov Subspace Approximations to the Matrix Exponential Operator. SIAM Journal on Numerical Analysis, 1997, 34, 1911-1925.	1.1	613
32	Finite element discretization of semilinear acoustic wave equations with kinetic boundary conditions. Electronic Transactions on Numerical Analysis, 0, 53, 522-540.	0.0	8