JosÃ© MarÃa Gallardo Molina

List of Publications by Year
in descending order

25 papers	758 citations	840776 11 h-index	888059 17 g-index
27 all docs	27 docs citations	27 times ranked	435 citing authors

#	Article	IF	Citations
1	High order finite volume schemes based on reconstruction of states for solving hyperbolic systems with nonconservative products. Applications to shallow-water systems. Mathematics of Computation, 2006, 75, 1103-1135.	2.1	230
2	On a well-balanced high-order finite volume scheme for shallow water equations with topography and dry areas. Journal of Computational Physics, 2007, 227, 574-601.	3.8	171
3	Second-Order Differential Operators with Integral Boundary Conditions and Generation of Analytic Semigroups. Rocky Mountain Journal of Mathematics, 2000, 30, 1265.	0.4	75
4	Well-Balanced High Order Extensions of Godunov's Method for Semilinear Balance Laws. SIAM Journal on Numerical Analysis, 2008, 46, 1012-1039.	2.3	72
5	GPU computing for shallow water flow simulation based on finite volume schemes. Comptes Rendus - Mecanique, 2011, 339, 165-184.	2.1	56
6	Approximate Osher–Solomon schemes for hyperbolic systems. Applied Mathematics and Computation, 2016, 272, 347-368.	2.2	34
7	A Class of Incomplete Riemann Solvers Based on Uniform Rational Approximations to the Absolute Value Function. Journal of Scientific Computing, 2014, 60, 363-389.	2.3	29
8	Two-Dimensional Compact Third-Order Polynomial Reconstructions. Solving Nonconservative Hyperbolic Systems Using GPUs. Journal of Scientific Computing, 2011, 48, 141-163.	2.3	19
9	Efficient numerical schemes for viscoplastic avalanches. Part 1: The 1D case. Journal of Computational Physics, 2014, 264, 55-90.	3.8	15
10	Multidimensional approximate Riemann solvers for hyperbolic nonconservative systems. Applications to shallow water systems. Journal of Computational Physics, 2021, 444, 110547.	3.8	15
11	On a class of two-dimensional incomplete Riemann solvers. Journal of Computational Physics, 2019, 386, 541-567.	3.8	14
12	Generation of Analytic Semi-Groups by Second-Order Differential Operators with Nonseparated Boundary Conditions. Rocky Mountain Journal of Mathematics, 2000, 30, 869.	0.4	7
13	Jacobian-free approximate solvers for hyperbolic systems: Application to relativistic magnetohydrodynamics. Computer Physics Communications, 2017, 219, 108-120.	7.5	7
14	A generalized duality method for solving variational inequalities Applications to some nonlinear Dirichlet problems. Numerische Mathematik, 2005, 100, 259-291.	1.9	5
15	Efficient numerical schemes for viscoplastic avalanches. Part 2: The 2D case. Journal of Computational Physics, 2018, 353, 460-490.	3.8	3
16	Efficient GPU Implementation of Multidimensional Incomplete Riemann Solvers for Hyperbolic Nonconservative Systems: Applications to Shallow Water Systems with Topography and Dry Areas. Journal of Scientific Computing, 2022, 92, .	2.3	3
17	Generation of Analytic Semigroups by Differential Operators with Mixed Boundary Conditions. Rocky Mountain Journal of Mathematics, 2003, 33, 831.	0.4	2
18	Second-order odes with non-separated boundary conditions and generation of analytic semigroups. Nonlinear Analysis: Theory, Methods & Applications, 1997, 30, 4991-4994.	1.1	0

#	Article	IF	Citations
19	Differential operators with mixed boundary conditions: generation of analytic semigroups. Nonlinear Analysis: Theory, Methods & Applications, 2001, 47, 1333-1344.	1.1	0
20	Jacobian-Free Incomplete Riemann Solvers. Springer Proceedings in Mathematics and Statistics, 2018, , 295-307.	0.2	0
21	On a class of genuinely 2D incomplete Riemann solvers for hyperbolic systems. Computational and Mathematical Methods, 2020, 2, e1074.	0.8	0
22	Incomplete Riemann Solvers Based on Functional Approximations to the Absolute Value Function. SEMA SIMAI Springer Series, 2021, , 3-27.	0.7	0
23	Methods and models for biomedical problems. , 2012, , 349-382.		0
24	Approximate Osher-Solomon Schemes for Hyperbolic Systems. SEMA SIMAI Springer Series, 2016, , 1-16.	0.7	0
25	New Types of Jacobian-Free Approximate Riemann Solvers for Hyperbolic Systems. Springer Proceedings in Mathematics and Statistics, 2017, , 23-31.	0.2	0