Michael Dumbser

List of Publications by Year
in descending order

193 papers	11,877 citations	25014 57 h-index	30058 103 g-index
194 all docs	194 docs citations	194 times ranked	3681 citing authors

#	Article	IF	Citations
1	Curl Constraint-Preserving Reconstruction and the Guidance it Gives for Mimetic Scheme Design. Communications on Applied Mathematics and Computation, 2023, 5, 235-294.	0.7	5
2	A staggered semi-implicit hybrid finite volume / finite element scheme for the shallow water equations at all Froude numbers. Applied Numerical Mathematics, 2022, 175, 108-132.	1.2	14
3	An Arbitrary High Order Well-Balanced ADER-DG Numerical Scheme for the Multilayer Shallow-Water Model with Variable Density. Journal of Scientific Computing, 2022, 90, 1.	1.1	4
4	On Thermodynamically Compatible Finite Volume Schemes for Continuum Mechanics. SIAM Journal of Scientific Computing, 2022, 44, A1723-A1751.	1.3	17
5	High order ADER schemes and GLM curl cleaning for a first order hyperbolic formulation of compressible flow with surface tension. Journal of Computational Physics, 2021, 426, 109898.	1.9	23
6	A structure-preserving staggered semi-implicit finite volume scheme for continuum mechanics. Journal of Computational Physics, 2021, 424, 109866.	1.9	32
7	A Posteriori Subcell Finite Volume Limiter for General $$P\_NP\_M$$ Schemes: Applications from Gasdynamics to Relativistic Magnetohydrodynamics. Journal of Scientific Computing, 2021, 86, 1.	1.1	13
8	A Simple but Efficient Concept of Blended Teaching of Mathematics for Engineering Students during the COVID-19 Pandemic. Education Sciences, 2021, 11, 56.	1.4	17
9	A unified first-order hyperbolic model for nonlinear dynamic rupture processes in diffuse fracture zones. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200130.	1.6	18
10	On High Order ADER Discontinuous Galerkin Schemes for First Order Hyperbolic Reformulations of Nonlinear Dispersive Systems. Journal of Scientific Computing, 2021, 87, 1.	1.1	31
11	On Thermodynamically Compatible Finite Volume Methods and Path-Conservative ADER Discontinuous Galerkin Schemes for Turbulent Shallow Water Flows. Journal of Scientific Computing, 2021, 88, 1.	1.1	26
12	Simulation of non-Newtonian viscoplastic flows with a unified first order hyperbolic model and a structure-preserving semi-implicitÂscheme. Computers and Fluids, 2021, 224, 104963.	1.3	15
13	A mass and momentumâ€conservative semiâ€implicit finite volume scheme for complex nonâ€hydrostatic free surface flows. International Journal for Numerical Methods in Fluids, 2021, 93, 2946-2967.	0.9	5
14	Arbitrary high order central non-oscillatory schemes on mixed-element unstructured meshes. Computers and Fluids, 2021, 225, 104961.	1.3	28
15	An alternative SPH formulation: ADER-WENO-SPH. Computer Methods in Applied Mechanics and Engineering, 2021, 382, 113871.	3.4	20
16	A semi-implicit hybrid finite volume/finite element scheme for all Mach number flows on staggered unstructured meshes. Applied Mathematics and Computation, 2021, 402, 126117.	1.4	17
17	A Massively Parallel Hybrid Finite Volume/Finite Element Scheme for Computational Fluid Dynamics. Mathematics, 2021, 9, 2316.	1.1	11
18	Staggered Semi-Implicit Hybrid Finite Volume/Finite Element Schemes for Turbulent and Non-Newtonian Flows. Mathematics, 2021, 9, 2972.	1.1	11

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19	A Well Balanced Finite Volume Scheme for General Relativity. SIAM Journal of Scientific Computing, 2021, 43, B1226-B1251.	1.3	6
20	On GLM curl cleaning for a first order reduction of the CCZ4 formulation of the Einstein field equations. Journal of Computational Physics, 2020, 404, 109088.	1.9	28
21	Efficient high order accurate staggered semi-implicit discontinuous Galerkin methods for natural convection problems. Computers and Fluids, 2020, 198, 104399.	1.3	40
22	High order direct Arbitrary-Lagrangian-Eulerian schemes on moving Voronoi meshes with topology changes. Journal of Computational Physics, 2020, 407, 109167.	1.9	59
23	High order ADER-DG schemes for the simulation of linear seismic waves induced by nonlinear dispersive free-surface water waves. Applied Numerical Mathematics, 2020, 158, 236-263.	1.2	4
24	A staggered semi-implicit hybrid FV/FE projection method for weakly compressible flows. Journal of Computational Physics, 2020, 421, 109743.	1.9	36
25	Space-time adaptive ADER discontinuous Galerkin schemes for nonlinear hyperelasticity with material failure. Journal of Computational Physics, 2020, 422, 109758.	1.9	20
26	A Novel Staggered Semi-implicit Space-Time Discontinuous Galerkin Method for the Incompressible Navier-Stokes Equations. Communications on Applied Mathematics and Computation, 2020, , 1.	0.7	0
27	ExaHyPE: An engine for parallel dynamically adaptive simulations of wave problems. Computer Physics Communications, 2020, 254, 107251.	3.0	40
28	A new continuum model for general relativistic viscous heat-conducting media. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190175.	1.6	18
29	A Staggered Semi-implicit Discontinuous Galerkin Scheme with a Posteriori Subcell Finite Volume Limiter for the Euler Equations of Gasdynamics. Journal of Scientific Computing, 2020, 83, 1.	1.1	2
30	High Order ADER Schemes for Continuum Mechanics. Frontiers in Physics, 2020, 8, .	1.0	47
31	A simple diffuse interface approach for compressible flows around moving solids of arbitrary shape based on a reduced Baer–Nunziato model. Computers and Fluids, 2020, 204, 104536.	1.3	30
32	Modeling wavefields in saturated elastic porous media based on thermodynamically compatible system theory for two-phase solid-fluid mixtures. Computers and Fluids, 2020, 206, 104587.	1.3	17
33	A hyperbolic reformulation of the Serre-Green-Naghdi model for general bottom topographies. Computers and Fluids, 2020, 212, 104716.	1.3	21
34	On Numerical Methods for Hyperbolic PDE with Curl Involutions. , 2020, , 125-134.		2
35	Two-Phase Computational Model for Small-Amplitude Wave Propagation in a Saturated Porous Medium. , 2020, , 313-320.		1
36	Studies on the energy and deep memory behaviour of a cache-oblivious, task-based hyperbolic PDE solver. International Journal of High Performance Computing Applications, 2019, 33, 973-986.	2.4	10

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37	An efficient hyperbolic relaxation system for dispersive non-hydrostatic water waves and its solution with high order discontinuous Galerkin schemes. Journal of Computational Physics, 2019, 394, 385-416.	1.9	30
38	Continuum mechanics with torsion. Continuum Mechanics and Thermodynamics, 2019, 31, 1517-1541.	1.4	23
39	A simple diffuse interface approach on adaptive Cartesian grids for the linear elastic wave equations with complex topography. Journal of Computational Physics, 2019, 386, 158-189.	1.9	19
40	Theoretical and numerical comparison of hyperelastic and hypoelastic formulations for Eulerian non-linear elastoplasticity. Journal of Computational Physics, 2019, 387, 481-521.	1.9	30
41	On the use of tabulated equations of state for multi-phase simulations in the homogeneous equilibrium limit. Shock Waves, 2019, 29, 769-793.	1.0	16
42	A posteriori sub-cell finite volume limiting of staggered semi-implicit discontinuous Galerkin schemes for the shallow water equations. Applied Numerical Mathematics, 2019, 135, 443-480.	1.2	16
43	A divergence–free semi–implicit finite volume scheme for ideal, viscous, and resistive magnetohydrodynamics. International Journal for Numerical Methods in Fluids, 2019, 89, 16-42.	0.9	41
44	FORCE schemes on moving unstructured meshes for hyperbolic systems. Computers and Mathematics With Applications, 2019, 78, 362-380.	1.4	2
45	Central WENO Subcell Finite Volume Limiters for ADER Discontinuous Galerkin Schemes on Fixed and Moving Unstructured Meshes. Communications in Computational Physics, 2019, 25, .	0.7	26
46	ADER-DG with a-posteriori finite-volume limiting to simulate tsunamis in a parallel adaptive mesh refinement framework. Computers and Fluids, 2018, 173, 299-306.	1.3	17
47	A second-order cell-centered Lagrangian ADER-MOOD finite volume scheme on multidimensional unstructured meshes for hydrodynamics. Journal of Computational Physics, 2018, 358, 103-129.	1.9	23
48	Staggered discontinuous Galerkin methods for the incompressible Navier–Stokes equations: Spectral analysis and computational results. Numerical Linear Algebra With Applications, 2018, 25, e2151.	0.9	15
49	Arbitrary high order accurate space–time discontinuous Galerkin finite element schemes on staggered unstructured meshes for linear elasticity. Journal of Computational Physics, 2018, 366, 386-414.	1.9	19
50	Conformal and covariant Z4 formulation of the Einstein equations: Strongly hyperbolic first-order reduction and solution with discontinuous Galerkin schemes. Physical Review D, 2018, 97, .	1.6	34
51	Reprint of: Direct Arbitrary-Lagrangian-Eulerian finite volume schemes on moving nonconforming unstructured meshes. Computers and Fluids, 2018, 169, 263-284.	1.3	3
52	Semi-implicit staggered discontinuous Galerkin schemes for axially symmetric viscous compressible flows in elastic tubes. Computers and Fluids, 2018, 167, 166-179.	1.3	11
53	A family of HLL-type solvers for the generalized Riemann problem. Computers and Fluids, 2018, 169, 201-212.	1.3	20
54	Efficient Implementation of ADER Discontinuous Galerkin Schemes for a Scalable Hyperbolic PDE Engine. Axioms, 2018, 7, 63.	0.9	39

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55	A well balanced diffuse interface method for complex nonhydrostatic free surface flows. Computers and Fluids, 2018, 175, 180-198.	1.3	24
56	Numerical methods for hydraulic transients in visco-elastic pipes. Journal of Fluids and Structures, 2018, 81, 230-254.	1.5	36
57	A Unified Hyperbolic Formulation for Viscous Fluids and Elastoplastic Solids. Springer Proceedings in Mathematics and Statistics, 2018, , 451-463.	0.1	7
58	Well-balanced Arbitrary-Lagrangian-Eulerian finite volume schemes on moving nonconforming meshes for the Euler equations of gas dynamics with gravity. Monthly Notices of the Royal Astronomical Society, 2018, 477, 2251-2275.	1.6	41
59	Preface to the special issue â€œRecent progress in numerical methods for nonlinear time-dependent flow & transport problemsâ€ Computers and Fluids, 2018, 169, 1-2.	1.3	1
60	A Meshfree Semi-implicit Smoothed Particle Hydrodynamics Method for Free Surface Flow. Lecture Notes in Computational Science and Engineering, 2017, , 35-52.	0.1	1
61	Semi-implicit discontinuous Galerkin methods for the incompressible Navierâ€"Stokes equations on adaptive staggered Cartesian grids. Computer Methods in Applied Mechanics and Engineering, 2017, 324, 170-203.	3.4	32
62	A comparison of explicit and semiâ€implicit finite volume schemes for viscous compressible flows in elastic pipes in fast transient regime. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2017, 97, 1358-1380.	0.9	5
63	A well-balanced path conservative SPH scheme for nonconservative hyperbolic systems with applications to shallow water and multi-phase flows. Computers and Fluids, 2017, 154, 102-122.	1.3	15
64	A pressure-based semi-implicit spaceâ€"time discontinuous Galerkin method on staggered unstructured meshes for the solution of the compressible Navierâ€"Stokes equations at all Mach numbers. Journal of Computational Physics, 2017, 341, 341-376.	1.9	81
65	Direct Arbitrary-Lagrangian-Eulerian finite volume schemes on moving nonconforming unstructured meshes. Computers and Fluids, 2017, 159, 254-275.	1.3	32
66	High order ADER schemes for a unified first order hyperbolic formulation of Newtonian continuum mechanics coupled with electro-dynamics. Journal of Computational Physics, 2017, 348, 298-342.	1.9	55
67	Spaceâ€"time adaptive ADER-DG schemes for dissipative flows: Compressible Navierâ€"Stokes and resistive MHD equations. Computer Physics Communications, 2017, 220, 297-318.	3.0	45
68	Central Weighted ENO Schemes for Hyperbolic Conservation Laws on Fixed and Moving Unstructured Meshes. SIAM Journal of Scientific Computing, 2017, 39, A2564-A2591.	1.3	71
69	Arbitrary-Lagrangianâ€"Eulerian Discontinuous Galerkin schemes with a posteriori subcell finite volume limiting on moving unstructured meshes. Journal of Computational Physics, 2017, 346, 449-479.	1.9	61
70	The role of 3D-hydraulics in habitat modelling of hydropeaking events. Science of the Total Environment, 2017, 575, 219-230.	3.9	24
71	An alternative smooth particle hydrodynamics formulation to simulate chemotaxis in porous media. Journal of Mathematical Biology, 2017, 74, 1037-1058.	0.8	15
72	Numerical Relativistic Magnetohydrodynamics with ADER Discontinuous Galerkin methods on adaptively refined meshes.. Journal of Physics: Conference Series, 2016, 719, 012024.	0.3	0

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73	High order accurate direct Arbitrary-Lagrangian-Eulerian ADER-WENO finite volume schemes on moving curvilinear unstructured meshes. Computers and Fluids, 2016, 136, 48-66.	1.3	24
74	High order ADER schemes for a unified first order hyperbolic formulation of continuum mechanics: Viscous heat-conducting fluids and elastic solids. Journal of Computational Physics, 2016, 314, 824-862.	1.9	138
75	A Novel Solver for the Generalized Riemann Problem Based on a Simplified LeFloch–Raviart Expansion and a Local Space–Time Discontinuous Galerkin Formulation. Journal of Scientific Computing, 2016, 69, 805-840.	1.1	19
76	Cell centered direct Arbitrary-Lagrangian-Eulerian ADER-WENO finite volume schemes for nonlinear hyperelasticity. Computers and Fluids, 2016, 134-135, 111-129.	1.3	28
77	A simple robust and accurate a posteriori sub-cell finite volume limiter for the discontinuous Galerkin method on unstructured meshes. Journal of Computational Physics, 2016, 319, 163-199.	1.9	91
78	Spectral semi-implicit and space–time discontinuous Galerkin methods for the incompressible Navier–Stokes equations on staggered Cartesian grids. Applied Numerical Mathematics, 2016, 110, 41-74.	1.2	37
79	A staggered space–time discontinuous Galerkin method for the three-dimensional incompressible Navier–Stokes equations on unstructured tetrahedral meshes. Journal of Computational Physics, 2016, 319, 294-323.	1.9	71
80	A path-conservative Osher-type scheme for axially symmetric compressible flows in flexible visco-elastic tubes. Applied Numerical Mathematics, 2016, 105, 47-63.	1.2	17
81	Efficient conservative ADER schemes based on WENO reconstruction and space-time predictor in primitive variables. Computational Astrophysics and Cosmology, 2016, 3, 1.	22.7	30
82	A new efficient formulation of the HLLEM Riemann solver for general conservative and non-conservative hyperbolic systems. Journal of Computational Physics, 2016, 304, 275-319.	1.9	139
83	A two-dimensional Riemann solver with self-similar sub-structure – Alternative formulation based on least squares projection. Journal of Computational Physics, 2016, 304, 138-161.	1.9	26
84	A conservative, weakly nonlinear semi-implicit finite volume scheme for the compressible Navier$\mathrm{\hat{a}}$Stokes equations with general equation of state. Applied Mathematics and Computation, 2016, 272, 479-497.	1.4	43
85	A space-time discontinuous Galerkin method for Boussinesq-type equations. Applied Mathematics and Computation, 2016, 272, 336-346.	1.4	22
86	An Efficient Quadrature-Free Formulation for High Order Arbitrary-Lagrangian–Eulerian ADER-WENO Finite Volume Schemes on Unstructured Meshes. Journal of Scientific Computing, 2016, 66, 240-274.	1.1	15
87	High order numerical simulations of the Richtmyer– Meshkov instability in a relativistic fluid. Physics of Fluids, 2015, 27, .	1.6	3
88	A New Hllem-Type Riemann Solver for Compressible Multi-phase Flows with Surface Tension. , 2015, , .		1
89	A high order special relativistic hydrodynamic and magnetohydrodynamic code with space–time adaptive mesh refinement. Computer Physics Communications, 2015, 188, 110-127.	3.0	44
90	Multidimensional Riemann problem with self-similar internal structure. Part II – Application to hyperbolic conservation laws on unstructured meshes. Journal of Computational Physics, 2015, 287, 269-292.	1.9	74

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91	Space–time adaptive ADER discontinuous Galerkin finite element schemes with a posteriori sub-cell finite volume limiting. Computers and Fluids, 2015, 118, 204-224.	1.3	112
92	A staggered space–time discontinuous Galerkin method for the incompressible Navier–Stokes equations on two-dimensional triangular meshes. Computers and Fluids, 2015, 119, 235-249.	1.3	40
93	Smooth Particle Hydrodynamics with nonlinear Moving-Least-Squares WENO reconstruction to model anisotropic dispersion in porous media. Advances in Water Resources, 2015, 80, 43-59.	1.7	19
94	High order cell-centered Lagrangian-type finite volume schemes with time-accurate local time stepping on unstructured triangular meshes. Journal of Computational Physics, 2015, 291, 120-150.	1.9	25
95	Direct Arbitrary-Lagrangian–Eulerian ADER-MOOD finite volume schemes for multidimensional hyperbolic conservation laws. Journal of Computational Physics, 2015, 292, 56-87.	1.9	51
96	A conservative finite volume scheme with time-accurate local time stepping for scalar transport on unstructured grids. Advances in Water Resources, 2015, 86, 217-230.	1.7	15
97	Solving the relativistic magnetohydrodynamics equations with ADER discontinuous Galerkin methods, a posteriori subcell limiting and adaptive mesh refinement. Monthly Notices of the Royal Astronomical Society, 2015, 452, 3010-3029.	1.6	71
98	Divergence-free MHD on unstructured meshes using high order finite volume schemes based on multidimensional Riemann solvers. Journal of Computational Physics, 2015, 299, 687-715.	1.9	80
99	A path-conservative finite volume scheme for compressible multi-phase flows with surface tension. Applied Mathematics and Computation, 2015, 271, 959-978.	1.4	11
100	An efficient semi-implicit finite volume method for axially symmetric compressible flows in compliant tubes. Applied Numerical Mathematics, 2015, 89, 24-44.	1.2	28
101	High-order ADER-WENO ALE schemes on unstructured triangular meshes—application of several node solvers to hydrodynamics and magnetohydrodynamics. International Journal for Numerical Methods in Fluids, 2014, 76, 737-778.	0.9	60
102	A posteriori subcell limiting of the discontinuous Galerkin finite element method for hyperbolic conservation laws. Journal of Computational Physics, 2014, 278, 47-75.	1.9	248
103	A staggered semi-implicit discontinuous Galerkin method for the two dimensional incompressible Navier–Stokes equations. Applied Mathematics and Computation, 2014, 248, 70-92.	1.4	43
104	A high order semi-implicit discontinuous Galerkin method for the two dimensional shallow water equations on staggered unstructured meshes. Applied Mathematics and Computation, 2014, 234, 623-644.	1.4	53
105	A new class of Moving-Least-Squares WENO–SPH schemes. Journal of Computational Physics, 2014, 270, 278-299.	1.9	63
106	Construction and comparison of parallel implicit kinetic solvers in three spatial dimensions. Journal of Computational Physics, 2014, 256, 17-33.	1.9	62
107	Lagrangian ADER-WENO finite volume schemes on unstructured triangular meshes based on genuinely multidimensional HLL Riemann solvers. Journal of Computational Physics, 2014, 267, 112-138.	1.9	62
108	Multidimensional HLLC Riemann solver for unstructured meshes – With application to Euler and MHD flows. Journal of Computational Physics, 2014, 261, 172-208.	1.9	121

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109	High order space–time adaptive ADER-WENO finite volume schemes for non-conservative hyperbolic systems. Computer Methods in Applied Mechanics and Engineering, 2014, 268, 359-387.	3.4	73
110	An efficient semi–implicit method for three–dimensional non–hydrostatic flows in compliant arterial vessels. International Journal for Numerical Methods in Biomedical Engineering, 2014, 30, 1170-1198.	1.0	18
111	A direct Arbitrary-Lagrangian–Eulerian ADER-WENO finite volume scheme on unstructured tetrahedral meshes for conservative and non-conservative hyperbolic systems in 3D. Journal of Computational Physics, 2014, 275, 484-523.	1.9	102
112	Arbitrary-Lagrangian–Eulerian ADER–WENO finite volume schemes with time-accurate local time stepping for hyperbolic conservation laws. Computer Methods in Applied Mechanics and Engineering, 2014, 280, 57-83.	3.4	36
113	Submerged granular channel flows driven by gravity. Advances in Water Resources, 2014, 63, 1-10.	1.7	53
114	A New Family of High Order Unstructured MOOD and ADER Finite Volume Schemes for Multidimensional Systems of Hyperbolic Conservation Laws. Communications in Computational Physics, 2014, 16, 718-763.	0.7	85
115	Implicit multiblock method for solving a kinetic equation on unstructured meshes. Computational Mathematics and Mathematical Physics, 2013, 53, 601-615.	0.2	3
116	A semi–implicit scheme for 3D free surface flows with high–order velocity reconstruction on unstructured Voronoi meshes. International Journal for Numerical Methods in Fluids, 2013, 72, 607-631.	0.9	38
117	Efficient implementation of high order unstructured WENO schemes for cavitating flows. Computers and Fluids, 2013, 86, 141-168.	1.3	53
118	A diffuse interface method for complex three-dimensional free surface flows. Computer Methods in Applied Mechanics and Engineering, 2013, 257, 47-64.	3.4	32
119	ADER-WENO finite volume schemes with space–time adaptive mesh refinement. Journal of Computational Physics, 2013, 248, 257-286.	1.9	170
120	High-order unstructured Lagrangian one-step WENO finite volume schemes for non-conservative hyperbolic systems: Applications to compressible multi-phase flows. Computers and Fluids, 2013, 86, 405-432.	1.3	58
121	High resolution methods for scalar transport problems in compliant systems of arteries. Applied Numerical Mathematics, 2013, 74, 62-82.	1.2	11
122	Efficient implementation of ADER schemes for Euler and magnetohydrodynamical flows on structured meshes – Speed comparisons with Runge–Kutta methods. Journal of Computational Physics, 2013, 235, 934-969.	1.9	102
123	Numerical simulations of solute transport in highly heterogeneous formations: A comparison of alternative numerical schemes. Advances in Water Resources, 2013, 52, 178-189.	1.7	70
124	A staggered semi-implicit spectral discontinuous Galerkin scheme for the shallow water equations. Applied Mathematics and Computation, 2013, 219, 8057-8077.	1.4	55
125	High-order finite volume schemes based on defect corrections. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2013, 93, 423-436.	0.9	4
126	Recent advances in high-order WENO finite volume methods for compressible multiphase flows. , 2013, , .		0

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127	Arbitrary-Lagrangian-Eulerian One-Step WENO Finite Volume Schemes on Unstructured Triangular Meshes. Communications in Computational Physics, 2013, 14, 1174-1206.	0.7	69
128	On Arbitrary-Lagrangian-Eulerian One-Step WENO Schemes for Stiff Hyperbolic Balance Laws. Communications in Computational Physics, 2013, 14, 301-327.	0.7	34
129	High-Resolution Mathematical and Numerical Analysis of Involution-Constrained PDEs. Oberwolfach Reports, 2013, 10, 2691-2747.	0.0	0
130	Enhanced Accuracy for Finite-Volume and Discontinuous Galerkin Schemes via Non-intrusive Corrections. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2013, , 267-282.	0.2	0
131	1. Methods to Numerically Solve Wave Equations. , 2012, , 15-48.		0
132	Comparison of solvers for the generalized Riemann problem for hyperbolic systems with source terms. Journal of Computational Physics, 2012, 231, 6472-6494.	1.9	51
133	Discontinuous Galerkin schemes with defect corrections based on reconstruction. Computers and Fluids, 2012, 62, 71-85.	1.3	2
134	Semi‐implicit numerical modeling of axially symmetric flows in compliant arterial systems. International Journal for Numerical Methods in Biomedical Engineering, 2012, 28, 257-272.	1.0	35
135	A novel numerical method of high‐order accuracy for flow in unsaturated porous media. International Journal for Numerical Methods in Engineering, 2012, 89, 227-240.	1.5	23
136	Reformulated Osher-Type Riemann Solver. , 2011, , 131-136.		0
137	On Universal Osher-Type Schemes for General Nonlinear Hyperbolic Conservation Laws. Communications in Computational Physics, 2011, 10, 635-671.	0.7	125
138	Numerical simulations of high Lundquist number relativistic magnetic reconnection. Monthly Notices of the Royal Astronomical Society, 2011, 418, 1004-1011.	1.6	56
139	A Simple Extension of the Osher Riemann Solver toÂNon-conservative Hyperbolic Systems. Journal of Scientific Computing, 2011, 48, 70-88.	1.1	177
140	ADER Schemes for Nonlinear Systems of Stiff Advection–Diffusion–Reaction Equations. Journal of Scientific Computing, 2011, 48, 173-189.	1.1	114
141	A simple two-phase method for the simulation of complex free surface flows. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1204-1219.	3.4	32
142	Explicit one-step time discretizations for discontinuous Galerkin and finite volume schemes based on local predictors. Journal of Computational Physics, 2011, 230, 4232-4247.	1.9	61
143	PNPM SCHEMES ON UNSTRUCTURED MESHES FOR TIME-DEPENDENT PARTIAL DIFFERENTIAL EQUATIONS. Advances in Computational Fluid Dynamics, 2011, , 203-233.	0.1	4
144	Local Time-Stepping for Explicit Discontinuous Galerkin Schemes. , 2011, , 171-177.		0

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145	Three-dimensional flow evolution after a dam break. Journal of Fluid Mechanics, 2010, 663, 456-477.	1.4	61
146	FORCE schemes on unstructured meshes II: Non-conservative hyperbolic systems. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 625-647.	3.4	119
147	Well-balanced high-order centered schemes on unstructured meshes for shallow water equations with fixed and mobile bed. Advances in Water Resources, 2010, 33, 291-303.	1.7	81
148	Arbitrary high order PNPM schemes on unstructured meshes for the compressible Navier–Stokes equations. Computers and Fluids, 2010, 39, 60-76.	1.3	243
149	A high–order discontinuous Galerkin method with time–accurate local time stepping for the Maxwell equations. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2009, 22, 77-103.	1.2	54
150	FORCE schemes on unstructured meshes I: Conservative hyperbolic systems. Journal of Computational Physics, 2009, 228, 3368-3389.	1.9	104
151	Efficient, high accuracy ADER-WENO schemes for hydrodynamics and divergence-free magnetohydrodynamics. Journal of Computational Physics, 2009, 228, 2480-2516.	1.9	209
152	Very high order PNPM schemes on unstructured meshes for the resistive relativistic MHD equations. Journal of Computational Physics, 2009, 228, 6991-7006.	1.9	191
153	A new 3D parallel SPH scheme for free surface flows. Computers and Fluids, 2009, 38, 1203-1217.	1.3	272
154	ADER schemes on unstructured meshes for nonconservative hyperbolic systems: Applications to geophysical flows. Computers and Fluids, 2009, 38, 1731-1748.	1.3	141
155	Well-balanced high-order centred schemes for non-conservative hyperbolic systems. Applications to shallow water equations with fixed and mobile bed. Advances in Water Resources, 2009, 32, 834-844.	1.7	112
156	A p-Adaptive Discontinuous Galerkin Method with Local Time Steps for Computational Seismology. , 2009, , 569-584.		3
157	Fluid-Acoustic Coupling and Wave Propagation. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2009, , 47-74.	0.2	4
158	Arbitrary High Order Finite Volume Schemes on Unstructured Meshes. , 2009, , 221-227.		0
159	Runge–Kutta discontinuous Galerkin method using WENO limiters II: Unstructured meshes. Journal of Computational Physics, 2008, 227, 4330-4353.	1.9	426
160	A unified framework for the construction of one-step finite volume and discontinuous Galerkin schemes on unstructured meshes. Journal of Computational Physics, 2008, 227, 8209-8253.	1.9	761
161	Finite volume schemes of very high order of accuracy for stiff hyperbolic balance laws. Journal of Computational Physics, 2008, 227, 3971-4001.	1.9	259
162	A highly accurate discontinuous Galerkin method for complex interfaces between solids and moving fluids. Geophysics, 2008, 73, T23-T35.	1.4	56

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163	Discontinuous Galerkin methods for wave propagation in poroelastic media. Geophysics, 2008, 73, T77-T97.	1.4	112
164	Seismic wave field modelling using high performance computing. , 2008, , .		6
165	On Source Terms and Boundary Conditions Using Arbitrary High Order Discontinuous Galerkin Schemes. International Journal of Applied Mathematics and Computer Science, 2007, 17, 297-310.	1.5	7
166	Accurate Calculation of Fault-Rupture Models Using the High-Order Discontinuous Galerkin Method on Tetrahedral Meshes. Bulletin of the Seismological Society of America, 2007, 97, 1570-1586.	1.1	14
167	A Coupling Scheme for Direct Numerical Simulations with an Acoustic Solver. ESAIM: Proceedings and Surveys, 2007, 16, 1-15.	0.4	2
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