Walter Boscheri

List of Publications by Year
in descending order

45 papers	1,207 citations	331670 21 h-index	377865 34 g-index
46 all docs	46 docs citations	46 times ranked	388 citing authors

#	Article	IF	Citations
1	A direct Arbitrary-Lagrangianâ€“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.	3.8	102
2	Central Weighted ENO Schemes for Hyperbolic Conservation Laws on Fixed and Moving Unstructured Meshes. SIAM Journal of Scientific Computing, 2017, 39, A2564-A2591.	2.8	71
3	Arbitrary-Lagrangian-Eulerian One-Step WENO Finite Volume Schemes on Unstructured Triangular Meshes. Communications in Computational Physics, 2013, 14, 1174-1206.	1.7	69
4	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.	3.8	62
5	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.	3.8	61
6	Highâ€order ADERâ€WENO ALE schemes on unstructured triangular meshesâ€”application of several node solvers to hydrodynamics and magnetohydrodynamics. International Journal for Numerical Methods in Fluids, 2014, 76, 737-778.	1.6	60
7	High order direct Arbitrary-Lagrangian-Eulerian schemes on moving Voronoi meshes with topology changes. Journal of Computational Physics, 2020, 407, 109167.	3.8	59
8	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.	2.5	58
9	Direct Arbitrary-Lagrangianâ€“Eulerian ADER-MOOD finite volume schemes for multidimensional hyperbolic conservation laws. Journal of Computational Physics, 2015, 292, 56-87.	3.8	51
10	An efficient class of WENO schemes with adaptive order for unstructured meshes. Journal of Computational Physics, 2020, 404, 109062.	3.8	45
11	Efficient high order accurate staggered semi-implicit discontinuous Galerkin methods for natural convection problems. Computers and Fluids, 2020, 198, 104399.	2.5	40
12	A semiâ€implicit scheme for 3D free surface flows with highâ€order velocity reconstruction on unstructured Voronoi meshes. International Journal for Numerical Methods in Fluids, 2013, 72, 607-631.	1.6	38
13	High order pressure-based semi-implicit IMEX schemes for the 3D Navier-Stokes equations at all Mach numbers. Journal of Computational Physics, 2021, 434, 110206.	3.8	37
14	A structure-preserving staggered semi-implicit finite volume scheme for continuum mechanics. Journal of Computational Physics, 2021, 424, 109866.	3.8	32
15	Theoretical and numerical comparison of hyperelastic and hypoelastic formulations for Eulerian non-linear elastoplasticity. Journal of Computational Physics, 2019, 387, 481-521.	3.8	30
16	Cell centered direct Arbitrary-Lagrangian-Eulerian ADER-WENO finite volume schemes for nonlinear hyperelasticity. Computers and Fluids, 2016, 134-135, 111-129.	2.5	28
17	A second order all Mach number IMEX finite volume solver for the three dimensional Euler equations. Journal of Computational Physics, 2020, 415, 109486.	3.8	28
18	Central WENO Subcell Finite Volume Limiters for ADER Discontinuous Galerkin Schemes on Fixed and Moving Unstructured Meshes. Communications in Computational Physics, 2019, 25, .	1.7	26

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19	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.	3.8	25
20	High order accurate direct Arbitrary-Lagrangian-Eulerian ADER-WENO finite volume schemes on moving curvilinear unstructured meshes. Computers and Fluids, 2016, 136, 48-66.	2.5	24
21	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.	3.8	23
22	An efficient second order all Mach finite volume solver for the compressible Navierâ€“Stokes equations. Computer Methods in Applied Mechanics and Engineering, 2021, 374, 113602.	6.6	21
23	High order direct Arbitrary-Lagrangian-Eulerian (ALE) PP schemes with WENO Adaptive-Order reconstruction on unstructured meshes. Journal of Computational Physics, 2019, 398, 108899.	3.8	20
24	Spatial spread of COVID-19 outbreak in Italy using multiscale kinetic transport equations with uncertainty. Mathematical Biosciences and Engineering, 2021, 18, 7028-7059.	1.9	18
25	Modeling and simulating the spatial spread of an epidemic through multiscale kinetic transport equations. Mathematical Models and Methods in Applied Sciences, 2021, 31, 1059-1097.	3.3	18
26	High Order Accurate Direct Arbitrary-Lagrangian-Eulerian ADER-MOOD Finite Volume Schemes for Non-Conservative Hyperbolic Systems with Stiff Source Terms. Communications in Computational Physics, 2017, 21, 271-312.	1.7	16
27	An Efficient Quadrature-Free Formulation for High Order Arbitrary-Lagrangianâ€“Eulerian ADER-WENO Finite Volume Schemes on Unstructured Meshes. Journal of Scientific Computing, 2016, 66, 240-274.	2.3	15
28	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.	2.5	15
29	High Order Direct Arbitrary-Lagrangianâ€“Eulerian (ALE) Finite Volume Schemes for Hyperbolic Systems on Unstructured Meshes. Archives of Computational Methods in Engineering, 2017, 24, 751-801.	10.2	14
30	Highâ€order divergenceâ€free velocity reconstruction for free surface flows on unstructured Voronoi meshes. International Journal for Numerical Methods in Fluids, 2019, 90, 296-321.	1.6	14
31	High order central WENO-Implicit-Explicit Runge Kutta schemes for the BGK model on general polygonal meshes. Journal of Computational Physics, 2020, 422, 109766.	3.8	14
32	A space-time semi-Lagrangian advection scheme on staggered Voronoi meshes applied to free surface flows. Computers and Fluids, 2020, 202, 104503.	2.5	11
33	A highâ€order parallel Eulerianâ€Lagrangian algorithm for advectionâ€diffusion problems on unstructured meshes. International Journal for Numerical Methods in Fluids, 2019, 91, 332-347.	1.6	9
34	High order finite volume schemes with IMEX time stepping for the Boltzmann model on unstructured meshes. Computer Methods in Applied Mechanics and Engineering, 2021, 387, 114180.	6.6	8
35	A 3D cell-centered ADER MOOD Finite Volume method for solving updated Lagrangian hyperelasticity on unstructured grids. Journal of Computational Physics, 2022, 449, 110779.	3.8	8
36	An efficient high order direct ALE ADER finite volume scheme with a posteriori limiting for hydrodynamics and magnetohydrodynamics. International Journal for Numerical Methods in Fluids, 2017, 84, 76-106.	1.6	7

#	Article	IF	Citations
37	A cell-centered implicit-explicit Lagrangian scheme for a unified model of nonlinear continuum mechanics on unstructured meshes. Journal of Computational Physics, 2022, 451, 110852.	3.8	7
38	An efficient numerical scheme for the thermo-hydraulic simulations of thermal grids. International Journal of Heat and Mass Transfer, 2020, 161, 120304.	4.8	6
39	Curl Constraint-Preserving Reconstruction and the Guidance it Gives for Mimetic Scheme Design. Communications on Applied Mathematics and Computation, 2023, 5, 235-294.	1.7	5
40	High order modal Discontinuous Galerkin Implicitâ€“Explicit Runge Kutta and Linear Multistep schemes for the Boltzmann model on general polygonal meshes. Computers and Fluids, 2022, 233, 105224.	2.5	4
41	FORCE schemes on moving unstructured meshes for hyperbolic systems. Computers and Mathematics With Applications, 2019, 78, 362-380.	2.7	2
42	A High-Order Conservative Semi-Lagrangian Solver for 3D Free Surface Flows with Sediment Transport on Voronoi Meshes. Communications on Applied Mathematics and Computation, 2023, 5, 596-637.	1.7	2
43	On the Construction of Conservative Semi-Lagrangian IMEX Advection Schemes for Multiscale Time Dependent PDEs. Journal of Scientific Computing, 2022, 90, 1.	2.3	2
44	A mass-conservative semi-implicit volume of fluid method for the Navierâ€“Stokes equations with high order semi-Lagrangian advection scheme. Computers and Fluids, 2022, 240, 105443.	2.5	1
45	High order Finite Difference/Discontinuous Galerkin schemes for the incompressible Navier-Stokes equations with implicit viscosity. Communications in Applied and Industrial Mathematics, 2022, 13, 21-38.	0.3	1