Gabriella Puppo

List of Publications by Year in descending order

43 papers	1,820 citations	394286 19 h-index	302012 39 g-index
44 all docs	44 docs citations	44 times ranked	714 citing authors

#	Article	IF	Citations
1	Central WENO schemes for hyperbolic systems of conservation laws. ESAIM: Mathematical Modelling and Numerical Analysis, 1999, 33, 547-571.	0.8	313
2	Compact Central WENO Schemes for Multidimensional Conservation Laws. SIAM Journal of Scientific Computing, 2000, 22, 656-672.	1.3	259
3	Well-balanced finite volume schemes of arbitrary order of accuracy for shallow water flows. Journal of Computational Physics, 2006, 213, 474-499.	1.9	254
4	Implicitâ€“Explicit Schemes for BGK Kinetic Equations. Journal of Scientific Computing, 2007, 32, 1-28.	1.1	143
5	A Fourth-Order Central WENO Scheme for Multidimensional Hyperbolic Systems of Conservation Laws. SIAM Journal of Scientific Computing, 2002, 24, 480-506.	1.3	121
6	High-Order Central Schemes for Hyperbolic Systems of Conservation Laws. SIAM Journal of Scientific Computing, 1999, 21, 294-322.	1.3	85
7	CWENO: Uniformly accurate reconstructions for balance laws. Mathematics of Computation, 2018, 87, 1689-1719.	1.1	65
8	A third order central WENO scheme for 2D conservation laws. Applied Numerical Mathematics, 2000, 33, 415-421.	1.2	58
9	High-Order Relaxation Schemes for Nonlinear Degenerate Diffusion Problems. SIAM Journal on Numerical Analysis, 2007, 45, 2098-2119.	1.1	45
10	Numerical Entropy and Adaptivity for Finite Volume Schemes. Communications in Computational Physics, 2011, 10, 1132-1160.	0.7	43
11	A consistent kinetic model for a two-component mixture with an application to plasma. Kinetic and Related Models, 2017, 10, 445-465.	0.5	39
12	Arbitrary Order Finite Volume Well-Balanced Schemes for the Euler Equations with Gravity. SIAM Journal of Scientific Computing, 2019, 41, A695-A721.	1.3	37
13	Numerical Entropy Production for Central Schemes. SIAM Journal of Scientific Computing, 2004, 25, 1382-1415.	1.3	33
14	Cool WENO schemes. Computers and Fluids, 2018, 169, 71-86.	1.3	29
15	Central Runge--Kutta Schemes for Conservation Laws. SIAM Journal of Scientific Computing, 2005, 26, 979-999.	1.3	27
16	An all speed second order well-balanced IMEX relaxation scheme for the Euler equations with gravity. Journal of Computational Physics, 2020, 420, 109723.	1.9	25
17	On the behavior of the total variation in CWENO methods for conservation laws. Applied Numerical Mathematics, 2000, 33, 407-414.	1.2	22
18	A robust and adaptive recoveryâ€based discontinuous Galerkin method for the numerical solution of convectionâ€“diffusion equations. International Journal for Numerical Methods in Fluids, 2015, 77, 63-91.	0.9	21

#	Article	IF	Citations
19	An Asymptotic-Preserving All-Speed Scheme for Fluid Dynamics and Nonlinear Elasticity. SIAM Journal of Scientific Computing, 2019, 41, A2850-A2879.	1.3	20
20	Microscopically implicitâ€“macroscopically explicit schemes for the BGK equation. Journal of Computational Physics, 2012, 231, 299-327.	1.9	17
21	Central Schemes for Nonconservative Hyperbolic Systems. SIAM Journal of Scientific Computing, 2012, 34, B523-B558.	1.3	15
22	Accurate Asymptotic Preserving Boundary Conditions for Kinetic Equations on Cartesian Grids. Journal of Scientific Computing, 2015, 65, 735-766.	1.1	15
23	BGK Polyatomic Model for Rarefied Flows. Journal of Scientific Computing, 2019, 78, 1893-1916.	1.1	15
24	Bubble stabilization of spectral Legendre methods for the advection-diffusion equation. Computer Methods in Applied Mechanics and Engineering, 1994, 118, 239-263.	3.4	14
25	A hybrid method for hydrodynamic-kinetic flow â€“ Part II â€“ Coupling of hydrodynamic and kinetic models. Journal of Computational Physics, 2012, 231, 5217-5242.	1.9	14
26	Numerical Entropy Production on Shocks and Smooth Transitions. Journal of Scientific Computing, 2002, 17, 263-271.	1.1	12
27	An all-speed relaxation scheme for gases and compressible materials. Journal of Computational Physics, 2017, 351, 1-24.	1.9	12
28	Multivalued Fundamental Diagrams of Traffic Flow in the Kinetic Fokker–Planck Limit. Multiscale Modeling and Simulation, 2017, 15, 1267-1293.	0.6	12
29	Well-Balanced High Order 1D Schemes on Non-uniform Grids and Entropy Residuals. Journal of Scientific Computing, 2016, 66, 1052-1076.	1.1	10
30	A Local Velocity Grid Approach for BGK Equation. Communications in Computational Physics, 2014, 16, 956-982.	0.7	9
31	Quinpi: Integrating Conservation Laws with CWENO Implicit Methods. Communications on Applied Mathematics and Computation, 2023, 5, 343-369.	0.7	6
32	Staggered Finite Difference Schemes for Conservation Laws. Journal of Scientific Computing, 2006, 27, 403-418.	1.1	5
33	A hybrid method for hydrodynamic-kinetic flow Part I: A particle-grid method for reducing stochastic noise in kinetic regimes. Journal of Computational Physics, 2011, 230, 5660-5683.	1.9	5
34	Semi-Conservative Finite Volume Schemes for Conservation Laws. SIAM Journal of Scientific Computing, 2019, 41, B576-B600.	1.3	4
35	Kinetic ES-BGK Models for a Multi-component Gas Mixture. Springer Proceedings in Mathematics and Statistics, 2018, , 195-208.	0.1	4
36	Simulation of particle dynamics for rarefied flows: Backflow in thruster plumes. European Journal of Mechanics, B/Fluids, 2017, 63, 25-38.	1.2	3

#	Article	IF	Citations
37	One- and Multi-dimensional CWENOZ Reconstructions for Implementing Boundary Conditions Without Ghost Cells. Communications on Applied Mathematics and Computation, 2023, 5, 143-169.	0.7	3
38	Angle dependence in coupling conditions for shallow water equations at channel junctions. Computers and Mathematics With Applications, 2022, 108, 49-65.	1.4	3
39	A Vortex-Grid Method for Prandtl's Equations. SIAM Journal of Scientific Computing, 1999, 20, 1229-1251.	1.3	2
40	Velocity Discretization in Numerical Schemes for BGK Equations. , 2008, , 857-864.		1
41	Bubble Stabilization of Spectral Methods: The Multidimensional Case. Journal of Scientific Computing, 1998, 13, 115-149.	1.1	0
42	A Comparison Between Relaxation and Kurganovâ€"Tadmor Schemes. Mathematics in Industry, 2008, , 236-240.	0.1	0
43	An Error Indicator for Semidiscrete Schemes. , 2006, , 103-108.		0