Jianxian Qiu

List of Publications by Year
in descending order

97 papers	4,175 citations	147726 31 h-index	114418 63 g-index
98 all docs	98 docs citations	98 times ranked	1460 citing authors

#	Article	IF	Citations
1	New Finite Difference Mapped WENO Schemes with Increasingly High Order of Accuracy. Communications on Applied Mathematics and Computation, 2023, 5, 64-96.	0.7	3
2	Preface to the Focused Issue on WENO Schemes. Communications on Applied Mathematics and Computation, 2023, 5, 1-2.	0.7	0
3	High order residual distribution conservative finite difference HWENO scheme for steady state problems. Journal of Computational Physics, 2022, 457, 111045.	1.9	2
4	A Quasi-Conservative Discontinuous Galerkin Method for Multi-component Flows Using the Non-oscillatory Kinetic Flux II: ALE Framework. Journal of Scientific Computing, 2022, 90, 1.	1.1	4
5	A fourth-order conservative semi-Lagrangian finite volume WENO scheme without operator splitting for kinetic and fluid simulations. Computer Methods in Applied Mechanics and Engineering, 2022, 395, 114973.	3.4	2
6	A Quasi-Conservative Discontinuous Galerkin Method for Multi-component Flows Using the Non-oscillatory Kinetic Flux. Journal of Scientific Computing, 2021, 87, 1.	1.1	10
7	A High-Order Well-Balanced Positivity-Preserving Moving Mesh DG Method for the Shallow Water Equations With Non-Flat Bottom Topography. Journal of Scientific Computing, 2021, 87, 1.	1.1	9
8	High-order Runge-Kutta discontinuous Galerkin methods with multi-resolution WENO limiters for solving steady-state problems. Applied Numerical Mathematics, 2021, 165, 482-499.	1.2	7
9	Positivity-preserving high order finite volume hybrid Hermite WENO schemes for compressible Navier-Stokes equations. Journal of Computational Physics, 2021, 445, 110596.	1.9	10
10	A high order conservative finite difference scheme for compressible two-medium flows. Journal of Computational Physics, 2021, 445, 110597.	1.9	4
11	A compact and efficient high-order gas-kinetic scheme. Journal of Computational Physics, 2021, 447, 110661.	1.9	4
12	Multi-resolution HWENO schemes for hyperbolic conservation laws. Journal of Computational Physics, 2021, 446, 110653.	1.9	10
13	A Conservative Semi-Lagrangian Hybrid Hermite WENO Scheme for Linear Transport Equations and the Nonlinear Vlasov--Poisson System. SIAM Journal of Scientific Computing, 2021, 43, A3580-A3606.	1.3	7
14	Compact ETDRK scheme for nonlinear dispersive wave equations. Computational and Applied Mathematics, 2021, 40, 1.	1.0	2
15	A simple, high-order and compact WENO limiter for RKDG method. Computers and Mathematics With Applications, 2020, 79, 317-336.	1.4	9
16	High-order Runge-Kutta discontinuous Galerkin methods with a new type of multi-resolution WENO limiters. Journal of Computational Physics, 2020, 404, 109105.	1.9	21
17	A hybrid Hermite WENO scheme for hyperbolic conservation laws. Journal of Computational Physics, 2020, 405, 109175.	1.9	28
18	A Modified Fifth Order Finite Difference Hermite WENO Scheme for Hyperbolic Conservation Laws. Journal of Scientific Computing, 2020, 85, 1.	1.1	13

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19	High-Order Conservative Positivity-Preserving DG-Interpolation for Deforming Meshes and Application to Moving Mesh DG Simulation of Radiative Transfer. SIAM Journal of Scientific Computing, 2020, 42, A3109-A3135.	1.3	9
20	A Hybrid Finite Difference WENO-ZQ Fast Sweeping Method for Static Hamilton–Jacobi Equations. Journal of Scientific Computing, 2020, 83, 1.	1.1	9
21	New Finite Difference Hermite WENO Schemes for Hamilton–Jacobi Equations. Journal of Scientific Computing, 2020, 83, 1.	1.1	3
22	High-order Runge-Kutta discontinuous Galerkin methods with a new type of multi-resolution WENO limiters on triangular meshes. Applied Numerical Mathematics, 2020, 153, 519-539.	1.2	15
23	A Hermite WENO scheme with artificial linear weights for hyperbolic conservation laws. Journal of Computational Physics, 2020, 417, 109583.	1.9	18
24	A quasi-Lagrangian moving mesh discontinuous Galerkin method for hyperbolic conservation laws. Journal of Computational Physics, 2019, 396, 544-578.	1.9	14
25	High order positivity-preserving discontinuous Galerkin schemes for radiative transfer equations on triangular meshes. Journal of Computational Physics, 2019, 397, 108811.	1.9	12
26	A high‐order Runge‐Kutta discontinuous Galerkin method with a subcell limiter on adaptive unstructured grids for two‐dimensional compressible inviscid flows. International Journal for Numerical Methods in Fluids, 2019, 91, 367-394.	0.9	11
27	Moving mesh finite difference solution of non-equilibrium radiation diffusion equations. Numerical Algorithms, 2019, 82, 1409-1440.	1.1	1
28	High order finite difference hermite WENO schemes for the Hamilton–Jacobi equations on unstructured meshes. Computers and Fluids, 2019, 183, 53-65.	1.3	5
29	A new hybrid WENO scheme for hyperbolic conservation laws. Computers and Fluids, 2019, 179, 422-436.	1.3	34
30	High Order Residual Distribution for Steady State Problems for Hyperbolic Conservation Laws. Journal of Scientific Computing, 2019, 79, 891-913.	1.1	2
31	New Finite Volume Weighted Essentially Nonoscillatory Schemes on Triangular Meshes. SIAM Journal of Scientific Computing, 2018, 40, A903-A928.	1.3	41
32	An Adaptive Moving Mesh Finite Element Solution of the Regularized Long Wave Equation. Journal of Scientific Computing, 2018, 74, 122-144.	1.1	12
33	Finite Volume HWENO Schemes for Nonconvex Conservation Laws. Journal of Scientific Computing, 2018, 75, 65-82.	1.1	4
34	Finite difference Hermite WENO schemes for the Hamilton–Jacobi equations. Journal of Computational Physics, 2017, 337, 27-41.	1.9	19
35	Runge-Kutta Discontinuous Galerkin Method with a Simple and Compact Hermite WENO Limiter on Unstructured Meshes. Communications in Computational Physics, 2017, 21, 623-649.	0.7	35
36	A new fifth order finite difference <scp>WENO</scp> scheme for <scp>H</scp>amilton–<scp>J</scp>acobi equations. Numerical Methods for Partial Differential Equations, 2017, 33, 1095-1113.	2.0	18

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37	Dimension-by-dimension moment-based central Hermite WENO schemes for directly solving Hamilton-Jacobi equations. Advances in Computational Mathematics, 2017, 43, 1023-1058.	0.8	8
38	An h-Adaptive RKDG Method for the Two-Dimensional Incompressible Euler Equations and the Guiding Center Vlasov Model. Journal of Scientific Computing, 2017, 73, 1316-1337.	1.1	7
39	A New Type of Modified WENO Schemes for Solving Hyperbolic Conservation Laws. SIAM Journal of Scientific Computing, 2017, 39, A1089-A1113.	1.3	15
40	A new third order finite volume weighted essentially non-oscillatory scheme on tetrahedral meshes. Journal of Computational Physics, 2017, 349, 220-232.	1.9	34
41	A New Type of Finite Volume WENO Schemes for Hyperbolic Conservation Laws. Journal of Scientific Computing, 2017, 73, 1338-1359.	1.1	71
42	Runge-Kutta Discontinuous Galerkin Method with a Simple and Compact Hermite WENO Limiter. Communications in Computational Physics, 2016, 19, 944-969.	0.7	50
43	Positivity-Preserving Runge-Kutta Discontinuous Galerkin Method on Adaptive Cartesian Grid for Strong Moving Shock. Numerical Mathematics, 2016, 9, 87-110.	0.6	13
44	Finite Difference Hermite WENO Schemes for Conservation Laws, II: An Alternative Approach. Journal of Scientific Computing, 2016, 66, 598-624.	1.1	32
45	A new fifth order finite difference WENO scheme for solving hyperbolic conservation laws. Journal of Computational Physics, 2016, 318, 110-121.	1.9	167
46	A conservative semi-Lagrangian HWENO method for the Vlasov equation. Journal of Computational Physics, 2016, 323, 95-114.	1.9	14
47	Positivity-Preserving High Order Finite Volume HWENO Schemes for Compressible Euler Equations. Journal of Scientific Computing, 2016, 68, 464-483.	1.1	24
48	High-order central Hermite WENO schemes: Dimension-by-dimension moment-based reconstructions. Journal of Computational Physics, 2016, 318, 222-251.	1.9	23
49	An h-Adaptive RKDG Method for the Vlasov–Poisson System. Journal of Scientific Computing, 2016, 69, 1346-1365.	1.1	7
50	Directly solving the Hamilton–Jacobi equations by Hermite WENO Schemes. Journal of Computational Physics, 2016, 307, 423-445.	1.9	26
51	A hybrid LDG-HWENO scheme for KdV-type equations. Journal of Computational Physics, 2016, 313, 754-774.	1.9	12
52	A New Lax–Wendroff Discontinuous Galerkin Method with Superconvergence. Journal of Scientific Computing, 2015, 65, 299-326.	1.1	13
53	A moving mesh finite difference method for equilibrium radiation diffusion equations. Journal of Computational Physics, 2015, 298, 661-677.	1.9	11
54	Finite Difference Hermite WENO Schemes for Hyperbolic Conservation Laws. Journal of Scientific Computing, 2015, 63, 548-572.	1.1	40

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55	High-order central Hermite WENO schemes on staggered meshes for hyperbolic conservation laws. Journal of Computational Physics, 2015, 281, 148-176.	1.9	23
56	Finite volume Hermite WENO schemes for solving the Hamilton–Jacobi equations II: Unstructured meshes. Computers and Mathematics With Applications, 2014, 68, 1137-1150.	1.4	6
57	Hybrid WENO schemes with different indicators on curvilinear grids. Advances in Computational Mathematics, 2014, 40, 747-772.	0.8	12
58	Maximum principle in linear finite element approximations of anisotropic diffusion–convection–reaction problems. Numerische Mathematik, 2014, 127, 515-537.	0.9	33
59	Finite Volume Hermite WENO Schemes for Solving the Hamilton-Jacobi Equation. Communications in Computational Physics, 2014, 15, 959-980.	0.7	7
60	Dispersion and Dissipation Errors of Two Fully Discrete Discontinuous Galerkin Methods. Journal of Scientific Computing, 2013, 55, 552-574.	1.1	34
61	WENO Schemes and Their Application as Limiters for RKDG Methods Based on Trigonometric Approximation Spaces. Journal of Scientific Computing, 2013, 55, 606-644.	1.1	20
62	An h-adaptive RKDG method with troubled-cell indicator for two-dimensional hyperbolic conservation laws. Advances in Computational Mathematics, 2013, 39, 445-463.	0.8	21
63	Hermite WENO schemes for Hamilton–Jacobi equations on unstructured meshes. Journal of Computational Physics, 2013, 254, 76-92.	1.9	19
64	Positivity-preserving DG and central DG methods for ideal MHD equations. Journal of Computational Physics, 2013, 238, 255-280.	1.9	59
65	Runge–Kutta discontinuous Galerkin method using a new type of WENO limiters on unstructured meshes. Journal of Computational Physics, 2013, 248, 200-220.	1.9	139
66	Adaptive Runge–Kutta discontinuous Galerkin method for complex geometry problems on Cartesian grid. International Journal for Numerical Methods in Fluids, 2013, 73, 847-868.	0.9	7
67	A Comparison of the Performance of Limiters for Runge-Kutta Discontinuous Galerkin Methods. Advances in Applied Mathematics and Mechanics, 2013, 5, 365-390.	0.7	5
68	Runge-Kutta Discontinuous Galerkin Method Using Weno-Type Limiters: Three-Dimensional Unstructured Meshes. Communications in Computational Physics, 2012, 11, 985-1005.	0.7	22
69	A Moving Mesh WENO Method for One-Dimensional Conservation Laws. SIAM Journal of Scientific Computing, 2012, 34, A2317-A2343.	1.3	22
70	Hybrid Well-balanced WENO Schemes with Different Indicators for Shallow Water Equations. Journal of Scientific Computing, 2012, 51, 527-559.	1.1	32
71	RKDG methods with WENO limiters for unsteady cavitating flow. Computers and Fluids, 2012, 57, 52-65.	1.3	14
72	An Eulerian–Lagrangian WENO finite volume scheme for advection problems. Journal of Computational Physics, 2012, 231, 4028-4052.	1.9	33

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73	WEIGHTED NON-OSCILLATORY LIMITERS FOR RUNGE-KUTTA DISCONTINUOUS GALERKIN METHODS. Advances in Computational Fluid Dynamics, 2011, , 153-184.	0.1	0
74	Local-Structure-Preserving Discontinuous Galerkin Methods with Lax-Wendroff Type Time Discretizations for Hamilton-Jacobi Equations. Journal of Scientific Computing, 2011, 47, 239-257.	1.1	11
75	Simulations of Shallow Water Equations with Finite Difference Lax-Wendroff Weighted Essentially Non-oscillatory Schemes. Journal of Scientific Computing, 2011, 47, 281-302.	1.1	15
76	RKDG methods with WENO type limiters and conservative interfacial procedure for one-dimensional compressible multi-medium flow simulations. Applied Numerical Mathematics, 2011, 61, 554-580.	1.2	25
77	Local DG method using WENO type limiters for convection–diffusion problems. Journal of Computational Physics, 2011, 230, 4353-4375.	1.9	13
78	Hybrid weighted essentially non-oscillatory schemes with different indicators. Journal of Computational Physics, 2010, 229, 8105-8129.	1.9	58
79	Weighted essential non–oscillatory schemes for tidal bore on unstructured meshes. International Journal for Numerical Methods in Fluids, 2009, 59, 611-630.	0.9	4
80	Hermite WENO Schemes and Their Application as Limiters for Runge-Kutta Discontinuous Galerkin Method, III: Unstructured Meshes. Journal of Scientific Computing, 2009, 39, 293-321.	1.1	342
81	Local Discontinuous Galerkin Finite Element Method and Error Estimates for One Class of Sobolev Equation. Journal of Scientific Computing, 2009, 41, 436-460.	1.1	41
82	Adaptive Runge–Kutta discontinuous Galerkin methods using different indicators: One-dimensional case. Journal of Computational Physics, 2009, 228, 6957-6976.	1.9	30
83	Simulations of detonation wave propagation in rectangular ducts using a three-dimensional WENO scheme. Combustion and Flame, 2008, 154, 644-659.	2.8	52
84	Runge–Kutta discontinuous Galerkin method using WENO limiters II: Unstructured meshes. Journal of Computational Physics, 2008, 227, 4330-4353.	1.9	426
85	A class of the fourth order finite volume Hermite weighted essentially non-oscillatory schemes. Science in China Series A: Mathematics, 2008, 51, 1549-1560.	0.5	32
86	WENO schemes with Lax–Wendroff type time discretizations for Hamilton–Jacobi equations. Journal of Computational and Applied Mathematics, 2007, 200, 591-605.	1.1	26
87	Runge–Kutta discontinuous Galerkin methods for compressible two-medium flow simulations: One-dimensional case. Journal of Computational Physics, 2007, 222, 353-373.	1.9	31
88	A Numerical Comparison of the Lax–Wendroff Discontinuous Galerkin Method Based on Different Numerical Fluxes. Journal of Scientific Computing, 2007, 30, 345-367.	1.1	14
89	A numerical study for the performance of the Runge–Kutta discontinuous Galerkin method based on different numerical fluxes. Journal of Computational Physics, 2006, 212, 540-565.	1.9	98
90	Hermite WENO schemes for Hamilton–Jacobi equations. Journal of Computational Physics, 2005, 204, 82-99.	1.9	64

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91	The discontinuous Galerkin method with Lax–Wendroff type time discretizations. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 4528-4543.	3.4	92
92	Hermite WENO schemes and their application as limiters for Runge–Kutta discontinuous Galerkin method II: Two dimensional case. Computers and Fluids, 2005, 34, 642-663.	1.3	216
93	A Comparison of Troubled-Cell Indicators for Runge--Kutta Discontinuous Galerkin Methods Using Weighted Essentially Nonoscillatory Limiters. SIAM Journal of Scientific Computing, 2005, 27, 995-1013.	1.3	153
94	Runge--Kutta Discontinuous Galerkin Method Using WENO Limiters. SIAM Journal of Scientific Computing, 2005, 26, 907-929.	1.3	326
95	Hermite WENO schemes and their application as limiters for Runge–Kutta discontinuous Galerkin method: one-dimensional case. Journal of Computational Physics, 2004, 193, 115-135.	1.9	317
96	Finite Difference WENO Schemes with Lax--Wendroff-Type Time Discretizations. SIAM Journal of Scientific Computing, 2003, 24, 2185-2198.	1.3	90
97	On the Construction, Comparison, and Local Characteristic Decomposition for High-Order Central WENO Schemes. Journal of Computational Physics, 2002, 183, 187-209.	1.9	217