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	Rungeâ€“Kutta discontinuous Galerkin method using WENO limiters II: Unstructured meshes. Journal of Computational Physics, 2008, 227, 4330-4353.	1.9	426
2	Hermite WENO Schemes and Their Application asÂLimiters for Runge-Kutta Discontinuous Galerkin Method, III: Unstructured Meshes. Journal of Scientific Computing, 2009, 39, 293-321.	1.1	342
3	Runge--Kutta Discontinuous Galerkin Method Using WENO Limiters. SIAM Journal of Scientific Computing, 2005, 26, 907-929.	1.3	326
4	Hermite WENO schemes and their application as limiters for Rungeâ€“Kutta discontinuous Galerkin method: one-dimensional case. Journal of Computational Physics, 2004, 193, 115-135.	1.9	317
5	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
6	Hermite WENO schemes and their application as limiters for Rungeâ€“Kutta discontinuous Galerkin method II: Two dimensional case. Computers and Fluids, 2005, 34, 642-663.	1.3	216
7	A new fifth order finite difference WENO scheme for solving hyperbolic conservation laws. Journal of Computational Physics, 2016, 318, 110-121.	1.9	167
8	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
9	Rungeâ€“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
10	A numerical study for the performance of the Rungeâ€“Kutta discontinuous Galerkin method based on different numerical fluxes. Journal of Computational Physics, 2006, 212, 540-565.	1.9	98
11	The discontinuous Galerkin method with Laxâ€“Wendroff type time discretizations. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 4528-4543.	3.4	92
12	Finite Difference WENO Schemes with Lax--Wendroff-Type Time Discretizations. SIAM Journal of Scientific Computing, 2003, 24, 2185-2198.	1.3	90
13	A New Type of Finite Volume WENO Schemes for Hyperbolic Conservation Laws. Journal of Scientific Computing, 2017, 73, 1338-1359.	1.1	71
14	Hermite WENO schemes for Hamiltonâ€“Jacobi equations. Journal of Computational Physics, 2005, 204, 82-99.	1.9	64
15	Positivity-preserving DG and central DG methods for ideal MHD equations. Journal of Computational Physics, 2013, 238, 255-280.	1.9	59
16	Hybrid weighted essentially non-oscillatory schemes with different indicators. Journal of Computational Physics, 2010, 229, 8105-8129.	1.9	58
17	Simulations of detonation wave propagation in rectangular ducts using a three-dimensional WENO scheme. Combustion and Flame, 2008, 154, 644-659.	2.8	52
18	Runge-Kutta Discontinuous Galerkin Method with a Simple and Compact Hermite WENO Limiter. Communications in Computational Physics, 2016, 19, 944-969.	0.7	50

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19	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
20	New Finite Volume Weighted Essentially Nonoscillatory Schemes on Triangular Meshes. SIAM Journal of Scientific Computing, 2018, 40, A903-A928.	1.3	41
21	Finite Difference Hermite WENO Schemes for Hyperbolic Conservation Laws. Journal of Scientific Computing, 2015, 63, 548-572.	1.1	40
22	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
23	Dispersion and Dissipation Errors of Two Fully Discrete Discontinuous Galerkin Methods. Journal of Scientific Computing, 2013, 55, 552-574.	1.1	34
24	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
25	A new hybrid WENO scheme for hyperbolic conservation laws. Computers and Fluids, 2019, 179, 422-436.	1.3	34
26	An Eulerianâ€“Lagrangian WENO finite volume scheme for advection problems. Journal of Computational Physics, 2012, 231, 4028-4052.	1.9	33
27	Maximum principle in linear finite element approximations of anisotropic diffusionâ€“convectionâ€“reaction problems. Numerische Mathematik, 2014, 127, 515-537.	0.9	33
28	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
29	Hybrid Well-balanced WENO Schemes with Different Indicators for Shallow Water Equations. Journal of Scientific Computing, 2012, 51, 527-559.	1.1	32
30	Finite Difference Hermite WENO Schemes for Conservation Laws, II: An Alternative Approach. Journal of Scientific Computing, 2016, 66, 598-624.	1.1	32
31	Rungeâ€“Kutta discontinuous Galerkin methods for compressible two-medium flow simulations: One-dimensional case. Journal of Computational Physics, 2007, 222, 353-373.	1.9	31
32	Adaptive Rungeâ€“Kutta discontinuous Galerkin methods using different indicators: One-dimensional case. Journal of Computational Physics, 2009, 228, 6957-6976.	1.9	30
33	A hybrid Hermite WENO scheme for hyperbolic conservation laws. Journal of Computational Physics, 2020, 405, 109175.	1.9	28
34	WENO schemes with Laxâ€“Wendroff type time discretizations for Hamiltonâ€“Jacobi equations. Journal of Computational and Applied Mathematics, 2007, 200, 591-605.	1.1	26
35	Directly solving the Hamiltonâ€“Jacobi equations by Hermite WENO Schemes. Journal of Computational Physics, 2016, 307, 423-445.	1.9	26
36	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

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37	Positivity-Preserving High Order Finite Volume HWENO Schemes for Compressible Euler Equations. Journal of Scientific Computing, 2016, 68, 464-483.	1.1	24
38	High-order central Hermite WENO schemes on staggered meshes for hyperbolic conservation laws. Journal of Computational Physics, 2015, 281, 148-176.	1.9	23
39	High-order central Hermite WENO schemes: Dimension-by-dimension moment-based reconstructions. Journal of Computational Physics, 2016, 318, 222-251.	1.9	23
40	Runge-Kutta Discontinuous Galerkin Method Using Weno-Type Limiters: Three-Dimensional Unstructured Meshes. Communications in Computational Physics, 2012, 11, 985-1005.	0.7	22
41	A Moving Mesh WENO Method for One-Dimensional Conservation Laws. SIAM Journal of Scientific Computing, 2012, 34, A2317-A2343.	1.3	22
42	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
43	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
44	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
45	Hermite WENO schemes for Hamiltonâ€"Jacobi equations on unstructured meshes. Journal of Computational Physics, 2013, 254, 76-92.	1.9	19
46	Finite difference Hermite WENO schemes for the Hamiltonâ€"Jacobi equations. Journal of Computational Physics, 2017, 337, 27-41.	1.9	19
47	A new fifth order finite difference <scp>WENO</scp> scheme for <scp>H</scp>amiltonâ€<scp>J</scp>acobi equations. Numerical Methods for Partial Differential Equations, 2017, 33, 1095-1113.	2.0	18
48	A Hermite WENO scheme with artificial linear weights for hyperbolic conservation laws. Journal of Computational Physics, 2020, 417, 109583.	1.9	18
49	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
50	A New Type of Modified WENO Schemes for Solving Hyperbolic Conservation Laws. SIAM Journal of Scientific Computing, 2017, 39, A1089-A1113.	1.3	15
51	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
52	A Numerical Comparison of the Laxâ€"Wendroff Discontinuous Galerkin Method Based on Different Numerical Fluxes. Journal of Scientific Computing, 2007, 30, 345-367.	1.1	14
53	RKDG methods with WENO limiters for unsteady cavitating flow. Computers and Fluids, 2012, 57, 52-65.	1.3	14
54	A conservative semi-Lagrangian HWENO method for the Vlasov equation. Journal of Computational Physics, 2016, 323, 95-114.	1.9	14

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55	A quasi-Lagrangian moving mesh discontinuous Galerkin method for hyperbolic conservation laws. Journal of Computational Physics, 2019, 396, 544-578.	1.9	14
56	Local DG method using WENO type limiters for convectionâ€"diffusion problems. Journal of Computational Physics, 2011, 230, 4353-4375.	1.9	13
57	A New Laxâ€"Wendroff Discontinuous Galerkin Method with Superconvergence. Journal of Scientific Computing, 2015, 65, 299-326.	1.1	13
58	Positivity-Preserving Runge-Kutta Discontinuous Galerkin Method on Adaptive Cartesian Grid for Strong Moving Shock. Numerical Mathematics, 2016, 9, 87-110.	0.6	13
59	A Modified Fifth Order Finite Difference Hermite WENO Scheme for Hyperbolic Conservation Laws. Journal of Scientific Computing, 2020, 85, 1.	1.1	13
60	Hybrid WENO schemes with different indicators on curvilinear grids. Advances in Computational Mathematics, 2014, 40, 747-772.	0.8	12
61	A hybrid LDG-HWENO scheme for KdV-type equations. Journal of Computational Physics, 2016, 313, 754-774.	1.9	12
62	An Adaptive Moving Mesh Finite Element Solution of the Regularized Long Wave Equation. Journal of Scientific Computing, 2018, 74, 122-144.	1.1	12
63	High order positivity-preserving discontinuous Galerkin schemes for radiative transfer equations on triangular meshes. Journal of Computational Physics, 2019, 397, 108811.	1.9	12
64	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
65	A moving mesh finite difference method for equilibrium radiation diffusion equations. Journal of Computational Physics, 2015, 298, 661-677.	1.9	11
66	A highâ€order Rungeâ€Kutta discontinuous Galerkin method with a subcell limiter on adaptive unstructured grids for twoâ€dimensional compressible inviscid flows. International Journal for Numerical Methods in Fluids, 2019, 91, 367-394.	0.9	11
67	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
68	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
69	Multi-resolution HWENO schemes for hyperbolic conservation laws. Journal of Computational Physics, 2021, 446, 110653.	1.9	10
70	A simple, high-order and compact WENO limiter for RKDG method. Computers and Mathematics With Applications, 2020, 79, 317-336.	1.4	9
71	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
72	A Hybrid Finite Difference WENO-ZQ Fast Sweeping Method for Static Hamiltonâ€"Jacobi Equations. Journal of Scientific Computing, 2020, 83, 1.	1.1	9

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73	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
74	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
75	Adaptive Rungeâ€"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
76	Finite Volume Hermite WENO Schemes for Solving the Hamilton-Jacobi Equation. Communications in Computational Physics, 2014, 15, 959-980.	0.7	7
77	An h-Adaptive RKDG Method for the Vlasovâ€"Poisson System. Journal of Scientific Computing, 2016, 69, 1346-1365.	1.1	7
78	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
79	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
80	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
81	Finite volume Hermite WENO schemes for solving the Hamiltonâ€"Jacobi equations II: Unstructured meshes. Computers and Mathematics With Applications, 2014, 68, 1137-1150.	1.4	6
82	High order finite difference hermite WENO schemes for the Hamiltonâ€"Jacobi equations on unstructured meshes. Computers and Fluids, 2019, 183, 53-65.	1.3	5
83	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
84	Weighted essential nonâ€•oscillatory schemes for tidal bore on unstructured meshes. International Journal for Numerical Methods in Fluids, 2009, 59, 611-630.	0.9	4
85	Finite Volume HWENO Schemes for Nonconvex Conservation Laws. Journal of Scientific Computing, 2018, 75, 65-82.	1.1	4
86	A high order conservative finite difference scheme for compressible two-medium flows. Journal of Computational Physics, 2021, 445, 110597.	1.9	4
87	A compact and efficient high-order gas-kinetic scheme. Journal of Computational Physics, 2021, 447, 110661.	1.9	4
88	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
89	New Finite Difference Hermite WENO Schemes for Hamiltonâ€"Jacobi Equations. Journal of Scientific Computing, 2020, 83, 1.	1.1	3
90	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

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91	High Order Residual Distribution for Steady State Problems for Hyperbolic Conservation Laws. Journal of Scientific Computing, 2019, 79, 891-913.	1.1	2
92	Compact ETDRK scheme for nonlinear dispersive wave equations. Computational and Applied Mathematics, 2021, 40, 1.	1.0	2
93	High order residual distribution conservative finite difference HWENO scheme for steady state problems. Journal of Computational Physics, 2022, 457, 111045.	1.9	2
94	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
95	Moving mesh finite difference solution of non-equilibrium radiation diffusion equations. Numerical Algorithms, 2019, 82, 1409-1440.	1.1	1
96	WEIGHTED NON-OSCILLATORY LIMITERS FOR RUNGE-KUTTA DISCONTINUOUS GALERKIN METHODS. Advances in Computational Fluid Dynamics, 2011, , 153-184.	0.1	0
97	Preface to the Focused Issue on WENO Schemes. Communications on Applied Mathematics and Computation, 2023, 5, 1-2.	0.7	0