Jesse Chan

List of Publications by Year
in descending order

Version: 2024-02-01

39 papers	663 citations	567281 15 h-index	610901 24 g-index
40 all docs	40 docs citations	40 times ranked	356 citing authors

#	Article	IF	Citations
1	Entropy stable modal discontinuous Galerkin schemes and wall boundary conditions for the compressible Navier-Stokes equations. Journal of Computational Physics, 2022, 448, 110723.	3.8	11
2	Efficient computation of Jacobian matrices for entropy stable summation-by-parts schemes. Journal of Computational Physics, 2022, 448, 110701.	3.8	5
3	Provably stable flux reconstruction high-order methods on curvilinear elements. Journal of Computational Physics, 2022, 463, 111259.	3.8	5
4	High-order entropy stable discontinuous Galerkin methods for the shallow water equations: Curved triangular meshes and GPU acceleration. Computers and Mathematics With Applications, 2021, 82, 179-199.	2.7	15
5	Entropy Stable Discontinuous Galerkin Methods for Nonlinear Conservation Laws on Networks and Multi-Dimensional Domains. Journal of Scientific Computing, 2021, 87, 1.	2.3	2
6	A high order discontinuous Galerkin method for the symmetric form of the anisotropic viscoelastic wave equation. Computers and Mathematics With Applications, 2021, 99, 113-132.	2.7	4
7	Mortar-based Entropy-Stable Discontinuous Galerkin Methods on Non-conforming Quadrilateral and Hexahedral Meshes. Journal of Scientific Computing, 2021, 89, 1.	2.3	1
8	Bernstein-BÃ©zier weight-adjusted discontinuous Galerkin methods for wave propagation in heterogeneous media. Journal of Computational Physics, 2020, 400, 108971.	3.8	4
9	A weight-adjusted discontinuous Galerkin method for the poroelastic wave equation: Penalty fluxes and micro-heterogeneities. Journal of Computational Physics, 2020, 403, 109061.	3.8	21
10	Entropy stable reduced order modeling of nonlinear conservation laws. Journal of Computational Physics, 2020, 423, 109789.	3.8	23
11	A weight-adjusted discontinuous Galerkin method for wave propagation in coupled elastic-acoustic media. Journal of Computational Physics, 2020, 418, 109632.	3.8	4
12	Skew-Symmetric Entropy Stable Modal Discontinuous Galerkin Formulations. Journal of Scientific Computing, 2019, 81, 459-485.	2.3	20
13	Surgeon Type and Outcomes After Inpatient Ankle Arthrodesis and Total Ankle Arthroplasty. Journal of Bone and Joint Surgery - Series A, 2019, 101, 127-135.	3.0	17
14	Leapfrog Time-Stepping for Hermite Methods. Journal of Scientific Computing, 2019, 80, 289-314.	2.3	2
15	Efficient Entropy Stable Gauss Collocation Methods. SIAM Journal of Scientific Computing, 2019, 41, A2938-A2966.	2.8	35
16	On discretely entropy stable weight-adjusted discontinuous Galerkin methods: curvilinear meshes. Journal of Computational Physics, 2019, 378, 366-393.	3.8	24
17	Multi-patch discontinuous Galerkin isogeometric analysis for wave propagation: Explicit time-stepping and efficient mass matrix inversion. Computer Methods in Applied Mechanics and Engineering, 2018, 333, 22-54.	6.6	19
18	On discretely entropy conservative and entropy stable discontinuous Galerkin methods. Journal of Computational Physics, 2018, 362, 346-374.	3.8	89

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19	Weightâ€adjusted discontinuous Galerkin methods: Matrixâ€valued weights and elastic wave propagation in heterogeneous media. International Journal for Numerical Methods in Engineering, 2018, 113, 1779-1809.	2.8	16
20	Reduced storage nodal discontinuous Galerkin methods on semi-structured prismatic meshes. Computers and Mathematics With Applications, 2017, 73, 775-793.	2.7	1
21	GPU-Accelerated Bernstein--BÃ©zier Discontinuous Galerkin Methods for Wave Problems. SIAM Journal of Scientific Computing, 2017, 39, A628-A654.	2.8	15
22	A GPUâ€accelerated nodal discontinuous Galerkin method with highâ€order absorbing boundary conditions and corner/edge compatibility. International Journal for Numerical Methods in Engineering, 2017, 112, 1659-1686.	2.8	10
23	A geometric multigrid preconditioning strategy for DPG system matrices. Computers and Mathematics With Applications, 2017, 74, 2018-2043.	2.7	13
24	On the penalty stabilization mechanism for upwind discontinuous Galerkin formulations of first order hyperbolic systems. Computers and Mathematics With Applications, 2017, 74, 3099-3110.	2.7	8
25	Weight-Adjusted Discontinuous Galerkin Methods: Curvilinear Meshes. SIAM Journal of Scientific Computing, 2017, 39, A2395-A2421.	2.8	19
26	Variations on Hermite Methods for Wave Propagation. Communications in Computational Physics, 2017, 22, 303-337.	1.7	2
27	Weight-Adjusted Discontinuous Galerkin Methods: Wave Propagation in Heterogeneous Media. SIAM Journal of Scientific Computing, 2017, 39, A2935-A2961.	2.8	19
28	GPU-accelerated discontinuous Galerkin methods on hybrid meshes. Journal of Computational Physics, 2016, 318, 142-168.	3.8	56
29	Orthogonal Bases for Vertex-Mapped Pyramids. SIAM Journal of Scientific Computing, 2016, 38, A1146-A1170.	2.8	6
30	Robust DPG Methods for Transient Convection-Diffusion. Lecture Notes in Computational Science and Engineering, 2016, , 179-203.	0.3	5
31	A Short Note on a Bernstein--Bezier Basis for the Pyramid. SIAM Journal of Scientific Computing, 2016, 38, A2162-A2172.	2.8	7
32	A Comparison of High Order Interpolation Nodes for the Pyramid. SIAM Journal of Scientific Computing, 2015, 37, A2151-A2170.	2.8	15
33	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si7.gif" display="inline" overflow="scroll"><mml:mi>h</mml:mi><mml:mi>p</mml:mi></mml:math>-finite element trace inequalities for the pyramid. Computers and Mathematics With Applications, 2015, 69, 510-517.	2.7	5
34	Locally conservative discontinuous Petrovâ€“Galerkin finite elements for fluid problems. Computers and Mathematics With Applications, 2014, 68, 1530-1549.	2.7	31
35	A dual Petrovâ€“Galerkin finite element method for the convectionâ€“diffusion equation. Computers and Mathematics With Applications, 2014, 68, 1513-1529.	2.7	21
36	A DPG method for steady viscous compressible flow. Computers and Fluids, 2014, 98, 69-90.	2.5	32

#	Article	IF	Citations
37	A robust DPG method for convection-dominated diffusion problems II: Adjoint boundary conditions and mesh-dependent test norms. Computers and Mathematics With Applications, 2014, 67, 771-795.	2.7	72
38	High order weightâ€adjusted discontinuous Galerkin methods for wave propagation on moving curved meshes. International Journal for Numerical Methods in Engineering, 0, , .	2.8	0
39	On the Entropy Projection and the Robustness of High Order Entropy Stable Discontinuous Galerkin Schemes for Under-Resolved Flows. Frontiers in Physics, 0, 10, .	2.1	7