Gonzalo Rubio Calzado

List of Publications by Year
in descending order

33 papers	398 citations	759233 12 h-index	794594 19 g-index
34 all docs	34 docs citations	34 times ranked	157 citing authors

#	Article	IF	Citations
1	Comparisons of p-adaptation strategies based on truncation- and discretisation-errors for high order discontinuous Galerkin methods. Computers and Fluids, 2016, 139, 36-46.	2.5	35
2	Adaptation strategies for high order discontinuous Galerkin methods based on Tau-estimation. Journal of Computational Physics, 2016, 306, 216-236.	3.8	33
3	Improving the stability of multiple-relaxation lattice Boltzmann methods with central moments. Computers and Fluids, 2018, 172, 397-409.	2.5	33
4	Design of a Smagorinsky spectral Vanishing Viscosity turbulence model for discontinuous Galerkin methods. Computers and Fluids, 2020, 200, 104440.	2.5	30
5	A p-multigrid strategy with anisotropic p-adaptation based on truncation errors for high-order discontinuous Galerkin methods. Journal of Computational Physics, 2019, 378, 209-233.	3.8	28
6	Dispersion-Dissipation Analysis for Advection Problems with Nonconstant Coefficients: Applications to Discontinuous Galerkin Formulations. SIAM Journal of Scientific Computing, 2018, 40, A747-A768.	2.8	24
7	Upwind methods for the Baerâ€“Nunziato equations and higher-order reconstruction using artificial viscosity. Journal of Computational Physics, 2016, 326, 805-827.	3.8	22
8	Sensitivity analysis to unsteady perturbations of complex flows: a discrete approach. International Journal for Numerical Methods in Fluids, 2014, 76, 1088-1110.	1.6	19
9	The Bassi Rebay 1 scheme is a special case of the Symmetric Interior Penalty formulation for discontinuous Galerkin discretisations with Gaussâ€“Lobatto points. Journal of Computational Physics, 2018, 363, 1-10.	3.8	19
10	Insights on Aliasing Driven Instabilities for Advection Equations with Application to Gaussâ€“Lobatto Discontinuous Galerkin Methods. Journal of Scientific Computing, 2018, 75, 1262-1281.	2.3	19
11	A freeâ€“energy stable nodal discontinuous Galerkin approximation with summationâ€“byâ€“parts property for the Cahnâ€“Hilliard equation. Journal of Computational Physics, 2020, 403, 109072.	3.8	16
12	Entropyâ€“stable discontinuous Galerkin approximation with summationâ€“byâ€“parts property for the incompressible Navierâ€“Stokes/Cahnâ€“Hilliard system. Journal of Computational Physics, 2020, 408, 109363.	3.8	15
13	An entropyâ€“stable discontinuous Galerkin approximation for the incompressible Navierâ€“Stokes equations with variable density and artificial compressibility. Journal of Computational Physics, 2020, 408, 109241.	3.8	13
14	Truncation Error Estimation in the p-Anisotropic Discontinuous Galerkin Spectral Element Method. Journal of Scientific Computing, 2019, 78, 433-466.	2.3	12
15	The Estimation of Truncation Error by $$au $$ -Estimation for Chebyshev Spectral Collocation Method. Journal of Scientific Computing, 2013, 57, 146-173.	2.3	10
16	On the efficiency of the IMPES method for two phase flow problems in porous media. Journal of Petroleum Science and Engineering, 2018, 164, 427-436.	4.2	9
17	Quasi-a priori truncation error estimation and higher order extrapolation for non-linear partial differential equations. Journal of Computational Physics, 2013, 253, 389-404.	3.8	8
18	Mathematical modeling of nitrogen-pressurized Halon flow in fire extinguishing systems. Fire Safety Journal, 2021, 122, 103356.	3.1	8

#	Article	IF	Citations
19	Quasi-a priori mesh adaptation and extrapolation to higher order using Ï„-estimation. Aerospace Science and Technology, 2014, 38, 76-87.	4.8	7
20	Quasi-A Priori Truncation Error Estimation in the DGSEM. Journal of Scientific Computing, 2015, 64, 425-455.	2.3	7
21	A freeâ€“energy stable pâ€“adaptive nodal discontinuous Galerkin for the Cahnâ€“Hilliard equation. Journal of Computational Physics, 2021, 442, 110409.	3.8	6
22	Advantages of static condensation in implicit compressible Navierâ€“Stokes DGSEM solvers. Computers and Fluids, 2020, 209, 104646.	2.5	5
23	A statically condensed discontinuous Galerkin spectral element method on Gauss-Lobatto nodes for the compressible Navier-Stokes equations. Journal of Computational Physics, 2021, 426, 109953.	3.8	5
24	A functional oriented truncation error adaptation method. Journal of Computational Physics, 2022, 451, 110883.	3.8	4
25	An entropyâ€“stable pâ€“adaptive nodal discontinuous Galerkin for the coupled Navierâ€“Stokes/Cahnâ€“Hilliard system. Journal of Computational Physics, 2022, 458, 111093.	3.8	3
26	A discontinuous Galerkin approximation for a wallâ€“bounded consistent threeâ€“component Cahnâ€“Hilliard flow model. Computers and Fluids, 2021, 225, 104971.	2.5	2
27	Study of Bubble Growth in a Multicomponent Mixture at High Pressure. , 0, , .		2
28	Implicit Large Eddy Simulations for NACA0012 Airfoils Using Compressible and Incompressible Discontinuous Galerkin Solvers. Lecture Notes in Computational Science and Engineering, 2020, , 477-487.	0.3	2
29	CFDâ€“based erosion and corrosion modeling in pipelines using a highâ€“order discontinuous Galerkin multiphase solver. Wear, 2021, 478-479, 203882.	3.1	1
30	Multi-physics methodology for phase change due to rapidly depressurised two-phase flows. International Journal of Multiphase Flow, 2021, 144, 103788.	3.4	1
31	Artificial Viscosity Discontinuous Galerkin Spectral Element Method for the Baer-Nunziato Equations. Lecture Notes in Computational Science and Engineering, 2017, , 613-625.	0.3	0
32	An Anisotropic p-Adaptation Multigrid Scheme for Discontinuous Galerkin Methods. Lecture Notes in Computational Science and Engineering, 2020, , 549-560.	0.3	0
33	Highâ€“order discontinuous Galerkin approximation for a threeâ€“phase incompressible Navierâ€“Stokes/Cahnâ€“Hilliard model. Computers and Fluids, 2022, , 105545.	2.5	0