Jaime Peraire

List of Publications by Year
in descending order

211 papers	10,671 citations	44069 48 h-index	39675 94 g-index
214 all docs	214 docs citations	214 times ranked	4266 citing authors

#	Article	IF	Citations
1	Adaptive remeshing for compressible flow computations. Journal of Computational Physics, 1987, 72, 449-466.	3.8	902
2	Balanced Model Reduction via the Proper Orthogonal Decomposition. AIAA Journal, 2002, 40, 2323-2330.	2.6	752
3	Finite element flux-corrected transport (FEM-FCT) for the euler and Navier-Stokes equations. International Journal for Numerical Methods in Fluids, 1987, 7, 1093-1109.	1.6	379
4	An alternating digital tree (ADT) algorithm for 3D geometric searching and intersection problems. International Journal for Numerical Methods in Engineering, 1991, 31, 1-17.	2.8	368
5	Sub-Cell Shock Capturing for Discontinuous Galerkin Methods. , 2006, , .		323
6	Finite element Euler computations in three dimensions. International Journal for Numerical Methods in Engineering, 1988, 26, 2135-2159.	2.8	286
7	The Compact Discontinuous Galerkin (CDG) Method for Elliptic Problems. SIAM Journal of Scientific Computing, 2008, 30, 1806-1824.	2.8	278
8	An implicit high-order hybridizable discontinuous Galerkin method for linear convectionâ€“diffusion equations. Journal of Computational Physics, 2009, 228, 3232-3254.	3.8	251
9	An implicit high-order hybridizable discontinuous Galerkin method for the incompressible Navierâ€“Stokes equations. Journal of Computational Physics, 2011, 230, 1147-1170.	3.8	197
10	A posteriori finite element bounds for linear-functional outputs of elliptic partial differential equations. Computer Methods in Applied Mechanics and Engineering, 1997, 150, 289-312.	6.6	187
11	Mesh adaptive computation of upper and lower bounds in limit analysis. International Journal for Numerical Methods in Engineering, 2008, 75, 899-944.	2.8	187
12	Discontinuous Galerkin solution of the Navierâ€“Stokes equations on deformable domains. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 1585-1595.	6.6	187
13	An implicit high-order hybridizable discontinuous Galerkin method for nonlinear convectionâ€“diffusion equations. Journal of Computational Physics, 2009, 228, 8841-8855.	3.8	184
14	Optimal control of vortex shedding using low-order models. Part I?open-loop model development. International Journal for Numerical Methods in Engineering, 1999, 44, 945-972.	2.8	173
15	Newton-GMRES Preconditioning for Discontinuous Galerkin Discretizations of the Navierâ€“Stokes Equations. SIAM Journal of Scientific Computing, 2008, 30, 2709-2733.	2.8	173
16	Implicit Large Eddy Simulation of transition to turbulence at low Reynolds numbers using a Discontinuous Galerkin method. International Journal for Numerical Methods in Engineering, 2011, 87, 232-261.	2.8	168
17	A hybridizable discontinuous Galerkin method for Stokes flow. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 582-597.	6.6	164
18	An immersed interface method for viscous incompressible flows involving rigid and flexible boundaries. Journal of Computational Physics, 2006, 220, 109-138.	3.8	155

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19	Adaptive remeshing for three-dimensional compressible flow computations. Journal of Computational Physics, 1992, 103, 269-285.	3.8	154
20	A â€˜best pointsâ€™ interpolation method for efficient approximation of parametrized functions. International Journal for Numerical Methods in Engineering, 2008, 73, 521-543.	2.8	144
21	Analysis of HDG methods for Stokes flow. Mathematics of Computation, 2011, 80, 723-723.	2.1	133
22	High-order implicit hybridizable discontinuous Galerkin methods for acoustics and elastodynamics. Journal of Computational Physics, 2011, 230, 3695-3718.	3.8	123
23	Curved Mesh Generation and Mesh Refinement using Lagrangian Solid Mechanics. , 2009, , .		115
24	Hybridizable discontinuous Galerkin methods for the time-harmonic Maxwellâ€™s equations. Journal of Computational Physics, 2011, 230, 7151-7175.	3.8	106
25	Hybridizable discontinuous Galerkin methods for partial differential equations in continuum mechanics. Journal of Computational Physics, 2012, 231, 5955-5988.	3.8	105
26	Shallow water problems: A general explicit formulation. International Journal for Numerical Methods in Engineering, 1986, 22, 547-574.	2.8	98
27	Robust topology optimization of three-dimensional photonic-crystal band-gap structures. Optics Express, 2014, 22, 22632.	3.4	92
28	High-Contrast Infrared Absorption Spectroscopy via Mass-Produced Coaxial Zero-Mode Resonators with Sub-10 nm Gaps. Nano Letters, 2018, 18, 1930-1936.	9.1	88
29	UNSTRUCTURED TETRAHEDRAL MESH GENERATION FOR THREE-DIMENSIONAL VISCOUS FLOWS. International Journal for Numerical Methods in Engineering, 1996, 39, 549-567.	2.8	86
30	Upper and lower bounds in limit analysis: Adaptive meshing strategies and discontinuous loading. International Journal for Numerical Methods in Engineering, 2009, 77, 471-501.	2.8	86
31	An implicit immersed boundary method for three-dimensional fluidâ€“membrane interactions. Journal of Computational Physics, 2009, 228, 8427-8445.	3.8	86
32	Nanogap-Enhanced Terahertz Sensing of 1 nm Thick (Î»/10⁶) Dielectric Films. ACS Photonics, 2015, 2, 417-424.	6.6	85
33	High-Throughput Fabrication of Resonant Metamaterials with Ultrasmall Coaxial Apertures via Atomic Layer Lithography. Nano Letters, 2016, 16, 2040-2046.	9.1	84
34	An efficient reducedâ€order modeling approach for nonâ€linear parametrized partial differential equations. International Journal for Numerical Methods in Engineering, 2008, 76, 27-55.	2.8	80
35	A Comparison of HDG Methods for Stokes Flow. Journal of Scientific Computing, 2010, 45, 215-237.	2.3	78
36	Bounds for Linearâ€“Functional Outputs of Coercive Partial Differential Equations : Local Indicators and Adaptive Refinement. Studies in Applied Mechanics, 1998, , 199-216.	0.4	77

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37	Efficiency of highâ€order elements for continuous and discontinuous Galerkin methods. International Journal for Numerical Methods in Engineering, 2013, 96, 529-560.	2.8	76
38	A time domain unstructured grid approach to the simulation of electromagnetic scattering in piecewise homogeneous media. Computer Methods in Applied Mechanics and Engineering, 1996, 134, 17-36.	6.6	70
39	A combined pFFT-multipole tree code, unsteady panel method with vortex particle wakes. International Journal for Numerical Methods in Fluids, 2007, 53, 1399-1422.	1.6	70
40	A 3D finite element multigrid solver for the Euler equations. , 1992, , .		69
41	Optimal control of vortex shedding using low-order models. Part II?model-based control. International Journal for Numerical Methods in Engineering, 1999, 44, 973-990.	2.8	69
42	The computation of three-dimensional flows using unstructured grids. Computer Methods in Applied Mechanics and Engineering, 1991, 87, 335-352.	6.6	68
43	The computation of bounds for linear-functional outputs of weak solutions to the two-dimensional elasticity equations. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 406-429.	6.6	68
44	A simple shockâ€capturing technique for highâ€order discontinuous Galerkin methods. International Journal for Numerical Methods in Fluids, 2012, 69, 1614-1632.	1.6	65
45	Optimization of a regularized distortion measure to generate curved highâ€order unstructured tetrahedral meshes. International Journal for Numerical Methods in Engineering, 2015, 103, 342-363.	2.8	65
46	Unstructured grid finite-element methods for fluid mechanics. Reports on Progress in Physics, 1998, 61, 569-638.	20.1	63
47	Compressible and incompressible flow; An algorithm for all seasons. Computer Methods in Applied Mechanics and Engineering, 1990, 78, 105-121.	6.6	62
48	A time-adaptive finite volume method for the Cahnâ€“Hilliard and Kuramotoâ€“Sivashinsky equations. Journal of Computational Physics, 2008, 227, 9985-10017.	3.8	62
49	A Hybridizable Discontinuous Galerkin Method for the Compressible Euler and Navier-Stokes Equations. , 2010, , .		62
50	The hybridized Discontinuous Galerkin method for Implicit Large-Eddy Simulation of transitional turbulent flows. Journal of Computational Physics, 2017, 336, 308-329.	3.8	60
51	Multigrid solution of the 3-D compressible euler equations on unstructured tetrahedral grids. International Journal for Numerical Methods in Engineering, 1993, 36, 1029-1044.	2.8	54
52	A point implicit unstructured grid solver for the euler and Navier-Stokes equations. International Journal for Numerical Methods in Fluids, 1989, 9, 405-425.	1.6	50
53	RANS Solutions Using High Order Discontinuous Galerkin Methods. , 2007, , .		48
54	A highâ€order hybridizable discontinuous Galerkin method for elliptic interface problems. International Journal for Numerical Methods in Engineering, 2013, 93, 183-200.	2.8	47

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55	A Posteriori Finite-Element Output Bounds for the Incompressible Navierâ€“Stokes Equations: Application to a Natural Convection Problem. Journal of Computational Physics, 2001, 172, 401-425.	3.8	46
56	Analysis of HDG Methods for Oseen Equations. Journal of Scientific Computing, 2013, 55, 392-431.	2.3	45
57	Computing Bounds for Linear Functionals of Exact Weak Solutions to Poisson's Equation. SIAM Journal on Numerical Analysis, 2004, 42, 1610-1630.	2.3	44
58	An explicit hybridizable discontinuous Galerkin method for the acoustic wave equation. Computer Methods in Applied Mechanics and Engineering, 2016, 300, 748-769.	6.6	44
59	Low order aerodynamic models for aeroelastic control of turbomachines. , 1999, , .		43
60	An Arnoldi approach for generation of reduced-order models for turbomachinery. Computers and Fluids, 2002, 31, 369-389.	2.5	41
61	Finite element multigrid solution of Euler flows past installed aero-engines. Computational Mechanics, 1993, 11, 433-451.	4.0	39
62	TVD algorithms for the solution of the compressible Euler equations on unstructured meshes. International Journal for Numerical Methods in Fluids, 1994, 19, 827-847.	1.6	39
63	Asymptotic a posteriori finite element bounds for the outputs of noncoercive problems: the Helmholtz and Burgers equations. Computer Methods in Applied Mechanics and Engineering, 1999, 171, 77-86.	6.6	39
64	Computing upper and lower bounds for the J-integral in two-dimensional linear elasticity. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 430-443.	6.6	39
65	Bandgap optimization of two-dimensional photonic crystals using semidefinite programming and subspace methods. Journal of Computational Physics, 2010, 229, 3706-3725.	3.8	39
66	An adaptive finite element method for transient compressible flows with moving boundaries. International Journal for Numerical Methods in Engineering, 1991, 32, 751-765.	2.8	38
67	Adaptive remeshing for shear band localization problems. Archive of Applied Mechanics, 1991, 61, 30-39.	2.2	37
68	A Computational Framework for Fluid Structure Interaction in Biologically Inspired Flapping Flight. , 2007, , .		37
69	Simulation of a store separation using the finite element method. Applied Mathematical Modelling, 1988, 12, 175-181.	4.2	36
70	A class of embedded discontinuous Galerkin methods for computational fluid dynamics. Journal of Computational Physics, 2015, 302, 674-692.	3.8	36
71	Distortion and quality measures for validating and generating high-order tetrahedral meshes. Engineering With Computers, 2015, 31, 423-437.	6.1	36
72	Navier-Stokes Solution Using Hybridizable Discontinuous Galerkin methods. , 2011, , .		34

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73	Hybridizable Discontinuous Galerkin Methods. Lecture Notes in Computational Science and Engineering, 2011, , 63-84.	0.3	34
74	Dilationâ€based shock capturing for highâ€order methods. International Journal for Numerical Methods in Fluids, 2016, 82, 398-416.	1.6	34
75	Unstructured mesh generation including directional refinement for aerodynamic flow simulation. Finite Elements in Analysis and Design, 1997, 25, 343-356.	3.2	32
76	A simple extension to multidimensional problems of the artificial viscosity due to Lapidus. Communications in Applied Numerical Methods, 1985, 1, 141-147.	0.5	31
77	Implicit Large Eddy Simulation of Transitional Flows Over Airfoils and Wings. , 2009, , .		31
78	A phase-based hybridizable discontinuous Galerkin method for the numerical solution of the Helmholtz equation. Journal of Computational Physics, 2015, 290, 318-335.	3.8	30
79	The solution of the compressible Euler equations at low Mach numbers using a stabilized finite element algorithm. Computer Methods in Applied Mechanics and Engineering, 2001, 190, 5719-5737.	6.6	29
80	Non-modal analysis of spectral element methods: Towards accurate and robust large-eddy simulations. Computer Methods in Applied Mechanics and Engineering, 2019, 346, 43-62.	6.6	29
81	Computing Bounds for Linear Functionals of Exact Weak Solutions to the Advection-Diffusion-Reaction Equation. SIAM Journal of Scientific Computing, 2004, 26, 636-652.	2.8	28
82	Design of photonic crystals with multiple and combined band gaps. Physical Review E, 2011, 83, 046703.	2.1	28
83	Aerodynamic design using unstructured meshes. , 1996, , .		27
84	A discontinuous Galerkin front tracking method for two-phase flows with surface tension. Computers and Fluids, 2010, 39, 1-14.	2.5	27
85	Numerical simulation of flapping wings using a panel method and a highâ€order Navierâ€“Stokes solver. International Journal for Numerical Methods in Engineering, 2012, 89, 1296-1316.	2.8	27
86	Symplectic Hamiltonian HDG methods for wave propagation phenomena. Journal of Computational Physics, 2017, 350, 951-973.	3.8	27
87	Modeling and observation of mid-infrared nonlocality in effective epsilon-near-zero ultranarrow coaxial apertures. Nature Communications, 2019, 10, 4476.	12.8	26
88	Mesh generation and adaptivity for the solution of compressible viscous high speed flows. International Journal for Numerical Methods in Engineering, 1995, 38, 1123-1148.	2.8	25
89	A Hybridizable Discontinuous Galerkin Method for the Incompressible Navier-Stokes Equations. , 2010, , .		25
90	A distortion measure to validate and generate curved highâ€order meshes on CAD surfaces with independence of parameterization. International Journal for Numerical Methods in Engineering, 2016, 106, 1100-1130.	2.8	25

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91	A hybridizable discontinuous Galerkin method for computing nonlocal electromagnetic effects in three-dimensional metallic nanostructures. Journal of Computational Physics, 2018, 355, 548-565.	3.8	25
92	Impact of Surface Roughness in Nanogap Plasmonic Systems. ACS Photonics, 2020, 7, 908-913.	6.6	25
93	Optimal control of vortex shedding using lowâ€order models. Part Iâ€”openâ€loop model development. International Journal for Numerical Methods in Engineering, 1999, 44, 945-972.	2.8	25
94	Active flow control using a reduced order model and optimum control. , 1996, , .		24
95	Oneâ€dimensional shockâ€capturing for highâ€order discontinuous Galerkin methods. International Journal for Numerical Methods in Fluids, 2013, 71, 737-755.	1.6	23
96	A posteriori finite element error bounds for non-linear outputs of the Helmholtz equation. International Journal for Numerical Methods in Fluids, 1999, 31, 17-36.	1.6	22
97	LEAST SQUARES FINITE ELEMENT SOLUTION OF COMPRESSIBLE AND INCOMPRESSIBLE FLOWS. International Journal of Numerical Methods for Heat and Fluid Flow, 1992, 2, 99-113.	2.8	21
98	An unstructured grid algorithm for the solution of Maxwell's equations in the time domain. International Journal for Numerical Methods in Fluids, 1994, 19, 849-863.	1.6	21
99	Approximate development of trimmed patches for surface tessellation. CAD Computer Aided Design, 1998, 30, 1077-1087.	2.7	20
100	Discontinuous Galerkin methods for the Navierâ€“Stokes equations using solenoidal approximations. International Journal for Numerical Methods in Fluids, 2010, 64, 549-564.	1.6	20
101	The Numerical Simulation of Flapping Wings at Low Reynolds Numbers. , 2010, , .		20
102	A model and variance reduction method for computing statistical outputs of stochastic elliptic partial differential equations. Journal of Computational Physics, 2015, 297, 700-720.	3.8	20
103	Adaptive explicit and implicit finite element methods for transient thermal analysis. International Journal for Numerical Methods in Engineering, 1992, 35, 655-670.	2.8	19
104	An Efficient Low Memory Implicit DG Algorithm for Time Dependent Problems. , 2006, , .		19
105	A variationally consistent mesh adaptation method for triangular elements in explicit Lagrangian dynamics. International Journal for Numerical Methods in Engineering, 2010, 82, 1073-1113.	2.8	19
106	An adaptive finite element method for transient compressible flows. International Journal for Numerical Methods in Engineering, 1991, 32, 1145-1159.	2.8	18
107	Comparing Aerodynamic Models for Numerical Simulation of Dynamics and Control of Aircraft. , 2006, , .		18
108	An Adaptive Shock-Capturing HDG Method for Compressible Flows. , 2011, , .		18

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109	Aircraft Charging and its Influence on Triggered Lightning. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031245.	3.3	18
110	FINITE ELEMENT LEAST SQUARES SOLUTION OF THE EULER EQUATIONS USING LINEAR AND QUADRATIC APPROXIMATIONS. International Journal of Computational Fluid Dynamics, 1993, 1, 1-23.	1.2	17
111	Hybrid PIC-DSMC simulation of a Hall thruster plume on unstructured grids. Computer Physics Communications, 2004, 164, 73-79.	7.5	17
112	Algebraic multigrid for stabilized finite element discretizations of the Navierâ€“Stokes equations. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 3667-3686.	6.6	17
113	A variationally consistent fractional time-step integration method for incompressible and nearly incompressible Lagrangian dynamics. International Journal for Numerical Methods in Engineering, 2005, 63, 1371-1395.	2.8	17
114	A Numerical Exploration of Parameter Dependence in Power Optimal Flapping Flight. , 2006, , .		17
115	An Embedded Discontinuous Galerkin Method for the Compressible Euler and Navier-Stokes Equations. , 2011, , .		17
116	The characteristic-Galerkin method for advection-dominated problemsâ€”An assessment. Computer Methods in Applied Mechanics and Engineering, 1987, 61, 359-369.	6.6	16
117	Advancing Front Grid Generation. , 1998, , .		16
118	Multifidelity Approaches for the Computational Analysis and Design of Effective Flapping Wing Vehicles. , 2008, , .		16
119	A hybridized discontinuous Petrovâ€“Galerkin scheme for scalar conservation laws. International Journal for Numerical Methods in Engineering, 2012, 91, 950-970.	2.8	16
120	Subgrid-scale modeling and implicit numerical dissipation in DG-based Large-Eddy Simulation. , 2017, , .		16
121	Charge Control Strategy for Aircraft-Triggered Lightning Strike Risk Reduction. AIAA Journal, 2018, 56, 1988-2002.	2.6	16
122	An implicit/explicit scheme for compressible viscous high speed flows. Computer Methods in Applied Mechanics and Engineering, 1989, 76, 245-258.	6.6	15
123	Numerical design of electrical-mechanical traps. Lab on A Chip, 2008, 8, 755.	6.0	15
124	Implicit large-eddy simulation of compressible flows using the Interior Embedded Discontinuous Galerkin method. , 2016, , .		15
125	A physics-based shock capturing method for unsteady laminar and turbulent flows. , 2018, , .		15
126	Defining Quality Measures for Validation and Generation of High-Order Tetrahedral Meshes. , 2014, , 109-126.		15

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127	An implicit finite-element method for high-speed flows. International Journal for Numerical Methods in Engineering, 1991, 32, 183-205.	2.8	14
128	Application of Model Order Reduction to Compressor Aeroelastic Models. Journal of Engineering for Gas Turbines and Power, 2002, 124, 332-339.	1.1	14
129	A High Order Discontinuous Galerkin Method for Fluid-Structure Interaction. , 2007, , .		14
130	Hybridization and Postprocessing Techniques for Mixed Eigenfunctions. SIAM Journal on Numerical Analysis, 2010, 48, 857-881.	2.3	14
131	Hybridized Discontinuous Galerkin Methods for Wave Propagation. Journal of Scientific Computing, 2018, 77, 1566-1604.	2.3	14
132	Topologically Reliable Approximation of Trimmed Polynomial Surface Patches. Graphical Models, 1999, 61, 84-109.	1.3	13
133	Parameterised electromagnetic scattering solutions for a range of incident wave angles. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 3587-3605.	6.6	13
134	A note on upper bound formulations in limit analysis. International Journal for Numerical Methods in Engineering, 2012, 91, 896-908.	2.8	13
135	Defining Quality Measures for Mesh Optimization on Parameterized CAD Surfaces. , 2013, , 85-102.		13
136	Fabrication-Adaptive Optimization with an Application to Photonic Crystal Design. Operations Research, 2014, 62, 418-434.	1.9	13
137	Computational study of glow corona discharge in wind: Biased conductor. Journal of Electrostatics, 2017, 89, 1-12.	1.9	13
138	Computing parametrized solutions for plasmonic nanogap structures. Journal of Computational Physics, 2018, 366, 89-106.	3.8	13
139	The development of an hp-adaptive finite element procedure for electromagnetic scattering problems. Finite Elements in Analysis and Design, 2003, 39, 751-764.	3.2	12
140	A Computational Investigation of Bio-Inspired Formation Flight and Ground Effect. , 2007, , .		12
141	Spectral approximations by the HDG method. Mathematics of Computation, 2014, 84, 1037-1059.	2.1	12
142	A hybridizable discontinuous Galerkin method for both thin and 3D nonlinear elastic structures. Computer Methods in Applied Mechanics and Engineering, 2019, 352, 561-585.	6.6	12
143	Applications of an adaptive unstructured solution algorithm to the analysis of high speed flows. , 1990, , .		11
144	Modelling of Sand Behaviour: Cyclic Loading, Anisotropy and Localization. , 1993, , 469-491.		11

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145	Practical 3D aerodynamic design and optimization using unstructured meshes. , 1996, , .		11
146	AEROELASTIC COMPUTATIONS IN THE TIME DOMAIN USING UNSTRUCTURED MESHES. International Journal for Numerical Methods in Engineering, 1997, 40, 2413-2431.	2.8	11
147	Gaussian functional regression for output prediction: Model assimilation and experimental design. Journal of Computational Physics, 2016, 309, 52-68.	3.8	11
148	An adaptive finite element method for high speed flows. , 1987, , .		10
149	Discontinuous Galerkin Solution of the Navier-Stokes Equations on Deformable Domains. , 2007, , .		10
150	Performance Characterization of Cyclic Blade Pitch Variation on a Vertical Axis Wind Turbine. , 2011, , .		10
151	The efficient computation of bounds for functionals of finite element solutions in large strain elasticity. Computer Methods in Applied Mechanics and Engineering, 2002, 191, 4807-4826.	6.6	9
152	A Low Order Model for Vertical Axis Wind Turbines. , 2010, , .		9
153	An HDG method for dissimilar meshes. IMA Journal of Numerical Analysis, 2022, 42, 1665-1699.	2.9	9
154	Symplectic Hamiltonian finite element methods for linear elastodynamics. Computer Methods in Applied Mechanics and Engineering, 2021, 381, 113843.	6.6	9
155	Scalable parallelization of the hybridized discontinuous Galerkin method for compressible flow. , 2013, , .		8
156	Gaussian functional regression for linear partial differential equations. Computer Methods in Applied Mechanics and Engineering, 2015, 287, 69-89.	6.6	8
157	GPU-accelerated Large Eddy Simulation of Hypersonic Flows. , 2020, , .		8
158	Fast Bounds for Outputs of Partial Differential Equations. , 1998, , 323-360.		8
159	Large-Eddy Simulation of Transonic Buffet Using Matrix-Free Discontinuous Galerkin Method. AIAA Journal, 2022, 60, 3060-3077.	2.6	8
160	Output bound approximations for partial differential equations; application to the incompressible navier-stokes equations. , 1999, , 93-108.		7
161	A Combined pFFT - Multipole Tree Code, Unsteady Panel Method with Vortex Particle Wakes. , 2005, , .		7
162	HDG Methods for Hyperbolic Problems. Handbook of Numerical Analysis, 2016, , 173-197.	1.8	7

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163	A nested hybridizable discontinuous Galerkin method for computing second-harmonic generation in three-dimensional metallic nanostructures. Journal of Computational Physics, 2021, 429, 110000.	3.8	7
164	Adaptive unstructured mesh methods for steady viscous flow. , 1991, , .		6
165	Application of Reduced-Order Aerodynamic Modeling to the Analysis of Structural Uncertainty in Bladed Disks. , 2002, , 1257.		6
166	GPU-accelerated sparse matrix-vector product for a hybridizable discontinuous Galerkin method. , 2011, , .		6
167	Implicit hybridized discontinuous Galerkin methods for compressible magnetohydrodynamics. Journal of Computational Physics: X, 2020, 5, 100042.	0.7	6
168	A posteriori finite element bounds for sensitivity derivatives of partial-differential-equation outputs. Finite Elements in Analysis and Design, 2000, 34, 271-290.	3.2	5
169	Arc reattachment driven by a turbulent boundary layer: implications for the sweeping of lightning arcs along aircraft. Journal Physics D: Applied Physics, 2016, 49, 375204.	2.8	5
170	An Empirical Interpolation and Model-Variance Reduction Method for Computing Statistical Outputs of Parametrized Stochastic Partial Differential Equations. SIAM-ASA Journal on Uncertainty Quantification, 2016, 4, 244-265.	2.0	5
171	A Time-Spectral Hybridizable Discontinuous Galerkin Method for Periodic Flow Problems. , 2013, , .		5
172	Unstructured mesh generation for 3D viscous flow. , 1998, , .		4
173	Functional Regression for State Prediction Using Linear PDE Models and Observations. SIAM Journal of Scientific Computing, 2016, 38, B247-B271.	2.8	4
174	Mesh Topology Preserving Boundary-Layer Adaptivity Method for Steady Viscous Flows. AIAA Journal, 2017, 55, 1970-1985.	2.6	4
175	Accelerated Residual Methods for the Iterative Solution of Systems of Equations. SIAM Journal of Scientific Computing, 2018, 40, A3157-A3179.	2.8	4
176	Wall-resolved implicit large eddy simulation of transonic buffet over the OAT15A airfoil using a discontinuous Galerkin method. , 2020, , .		4
177	Terahertz and infrared nonlocality and field saturation in extreme-scale nanoslits. Optics Express, 2020, 28, 8701.	3.4	4
178	Line relaxation methods for the solution of 2D and 3D compressible flows. , 1993, , .		4
179	Progress towards a 3D aerodynamic shape optimization tool for the compressible, high-Re Navier-Stokes equations discretized on unstructured meshes. , 1998, , .		3
180	A Hybridized Discontinuous Petrov-Galerkin Method for Compresible Flows. , 2011, , .		3

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181	Preliminary Investigation Into the Effects of Cross-Flow on Low Reynolds Number Transition. , 2011, , .		3
182	Binary optimization techniques for linear PDE-governed material design. Applied Physics A: Materials Science and Processing, 2012, 109, 1023-1030.	2.3	3
183	Advances in the development of a High Order, Viscous-Inviscid Interaction Solver. , 2013, , .		3
184	A pFFT Accelerated BEM Linear Strength Potential Flow Solver. , 2004, , .		3
185	Symplectic Hamiltonian finite element methods for electromagnetics. Computer Methods in Applied Mechanics and Engineering, 2022, 396, 114969.	6.6	3
186	AN UPWIND UNSTRUCTURED GRID SOLUTION ALGORITHM FOR COMPRESSIBLE FLOW. International Journal of Numerical Methods for Heat and Fluid Flow, 1993, 3, 283-304.	2.8	2
187	Elimination of Spurious Loss in Euler Equation Computations. AIAA Journal, 2000, 38, 411-417.	2.6	2
188	Progress Towards an Arbitrarily High-Order, Unstructured, Free-Wake Panel Solver. , 2013, , .		2
189	A Hybridized Multiscale Discontinuous Galerkin Method for Compressible Flows. , 2013, , .		2
190	Designing Phononic Crystals With Convex Optimization. , 2013, , .		2
191	One-Dimensional Shock-Capturing for High-Order Discontinuous Galerkin Methods. , 2009, , 307-325.		2
192	Robust tessellation of trimmed rational B-spline surface patches. , 0, , .		1
193	A High-Order Self-Adaptive Monolithic Solver for Viscous-Inviscid Interacting Flows. , 2013, , .		1
194	A posteriori goal-oriented bounds for the Poisson problem using potential and equilibrated flux reconstructions: Application to the hybridizable discontinuous Galerkin method. Computer Methods in Applied Mechanics and Engineering, 2021, 386, 114088.	6.6	1
195	Optimal control of vortex shedding using low-order models. Part Iâ€”open-loop model development. , 1999, 44, 945.		1
196	The Application of an Adaptive Upwind Unstructured Grid Solution Algorithm to the Simulation of Compressible Laminar Viscous Flows Over Compression Corners. , 1991, , 201-211.		1
197	A High-Resolution Flux Splitting Scheme for the Solution of the Compressible Navier-Stokes Equations on Triangular Grids. , 1994, , 167-180.		1
198	Application of Model Order Reduction to Compressor Aeroelastic Models. , 2000, , .		1

#	Article	IF	Citations
199	A Posteriori Output Bound for Partial Differential Equations Based on Elemental Error Bound Computing. Lecture Notes in Computer Science, 2003, , 1035-1044.	1.3	1
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