

Chongam Kim

List of Publications by Year in descending order

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85
papers

2,188
citations

331670

21
h-index

223800

46
g-index

86
all docs

86
docs citations

86
times ranked

754
citing authors

#	ARTICLE	IF	CITATIONS
1	Methods for the Accurate Computations of Hypersonic Flows. Journal of Computational Physics, 2001, 174, 38-80.	3.8	465
2	Accurate, efficient and monotonic numerical methods for multi-dimensional compressible flows. Journal of Computational Physics, 2005, 208, 570-615.	3.8	248
3	Cures for the shock instability: Development of a shock-stable Roe scheme. Journal of Computational Physics, 2003, 185, 342-374.	3.8	219
4	Multi-dimensional limiting process for hyperbolic conservation laws on unstructured grids. Journal of Computational Physics, 2010, 229, 788-812.	3.8	136
5	Accurate, efficient and monotonic numerical methods for multi-dimensional compressible flows. Journal of Computational Physics, 2005, 208, 527-569.	3.8	105
6	Multi-dimensional limiting process for three-dimensional flow physics analyses. Journal of Computational Physics, 2008, 227, 6001-6043.	3.8	79
7	Multi-dimensional limiting process for finite volume methods on unstructured grids. Computers and Fluids, 2012, 65, 8-24.	2.5	57
8	Sensitivity Analysis for the Navier-Stokes Equations with Two-Equation Turbulence Models. AIAA Journal, 2001, 39, 838-845.	2.6	56
9	Automated design methodology of turbulent internal flow using discrete adjoint formulation. Aerospace Science and Technology, 2007, 11, 163-173.	4.8	44
10	Numerical Study on the Unsteady-Force-Generation Mechanism of Insect Flapping Motion. AIAA Journal, 2008, 46, 1835-1848.	2.6	40
11	Parallel Computations of High-Lift Airfoil Flows Using Two-Equation Turbulence Models. AIAA Journal, 2000, 38, 1360-1368.	2.6	37
12	Computations of Homogeneous-Equilibrium Two-Phase Flows with Accurate and Efficient Shock-Stable Schemes. AIAA Journal, 2008, 46, 3012-3037.	2.6	37
13	Computational Study on Hysteretic Inlet Buzz Characteristics Under Varying Mass Flow Conditions. AIAA Journal, 2014, 52, 1357-1373.	2.6	35
14	Hierarchical multi-dimensional limiting strategy for correction procedure via reconstruction. Journal of Computational Physics, 2016, 308, 57-80.	3.8	33
15	Adjoint-Based Design Optimization of Vortex Generator in an S-Shaped Subsonic Inlet. AIAA Journal, 2012, 50, 2492-2507.	2.6	31
16	Aerodynamic Effects of Structural Flexibility in Two-Dimensional Insect Flapping Flight. Journal of Aircraft, 2011, 48, 894-909.	2.4	28
17	Higher-order multi-dimensional limiting strategy for discontinuous Galerkin methods in compressible inviscid and viscous flows. Computers and Fluids, 2014, 96, 377-396.	2.5	28
18	Optimizing a Boundary-Layer-Ingestion Offset Inlet by Discrete Adjoint Approach. AIAA Journal, 2010, 48, 2008-2016.	2.6	27

#	ARTICLE	IF	CITATIONS
19	High-order multi-dimensional limiting strategy with subcell resolution I. Two-dimensional mixed meshes. <i>Journal of Computational Physics</i> , 2018, 375, 1005-1032.	3.8	27
20	Effects of Optimized Bleed System on Supersonic Inlet Performance and Buzz. <i>Journal of Propulsion and Power</i> , 2020, 36, 211-222.	2.2	26
21	Higher-order multi-dimensional limiting process for DG and FR/CPR methods on tetrahedral meshes. <i>Computers and Fluids</i> , 2017, 154, 322-334.	2.5	23
22	Effects of camber angle on aerodynamic performance of flapping-wing micro air vehicle. <i>Journal of Fluids and Structures</i> , 2020, 97, 103101.	3.4	22
23	Numerical Analysis on Separation Dynamics of Strap-On Boosters in the Atmosphere. <i>Journal of Spacecraft and Rockets</i> , 2002, 39, 439-446.	1.9	20
24	Methods for compressible multiphase flows and their applications. <i>Shock Waves</i> , 2019, 29, 235-261.	1.9	19
25	Aerodynamic Redesign Using Discrete Adjoint Approach on Overset Mesh System. <i>Journal of Aircraft</i> , 2008, 45, 1643-1653.	2.4	18
26	Computations of Homogeneous Multiphase Real Fluid Flows at All Speeds. <i>AIAA Journal</i> , 2018, 56, 2623-2634.	2.6	18
27	Direct reconstruction method for discontinuous Galerkin methods on higher-order mixed-curved meshes I. Volume integration. <i>Journal of Computational Physics</i> , 2019, 395, 223-246.	3.8	18
28	Computational Investigation of Three-dimensional Unsteady Flowfield Characteristics around Insects' Flapping Flight. <i>AIAA Journal</i> , 2011, 49, 953-968.	2.6	17
29	A new finite volume method on junction coupling and boundary treatment for flow network system analyses. <i>International Journal for Numerical Methods in Fluids</i> , 2011, 65, 707-742.	1.6	17
30	A physics-based cavitation model ranging from inertial to thermal regimes. <i>International Journal of Heat and Mass Transfer</i> , 2021, 181, 121991.	4.8	15
31	Computational investigation of flow separation in a thrust-optimized parabolic nozzle during high-altitude testing. <i>Computers and Fluids</i> , 2020, 197, 104363.	2.5	14
32	An axisymmetric computational model of generalized hydrodynamic theory for rarefied multi-species gas flows. <i>Journal of Computational Physics</i> , 2009, 228, 4088-4117.	3.8	13
33	Exploring multi-stage shape optimization strategy of multi-body geometries using Kriging-based model and adjoint method. <i>Computers and Fluids</i> , 2012, 68, 71-87.	2.5	13
34	Design and analysis of the link mechanism for the flapping wing MAV using flexible multi-body dynamic analysis. <i>International Journal of Micro Air Vehicles</i> , 2017, 9, 253-269.	1.3	13
35	Pogo Accumulator Optimization Based on Multiphysics of Liquid Rockets and Neural Networks. <i>Journal of Spacecraft and Rockets</i> , 2020, 57, 809-822.	1.9	13
36	Direct reconstruction method for discontinuous Galerkin methods on higher-order mixed-curved meshes II. Surface integration. <i>Journal of Computational Physics</i> , 2020, 416, 109514.	3.8	13

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37	Separation control mechanism of airfoil using synthetic jet. Journal of Mechanical Science and Technology, 2007, 21, 1367-1375.	1.5	11
38	Separation Motion of Strap-On Boosters with Base Flow and Turbulence Effects. Journal of Spacecraft and Rockets, 2008, 45, 485-494.	1.9	10
39	Optimal Shape Design of the S-Shaped Subsonic Intake Using NURBS. , 2005, , .		9
40	Experimental surrogate-based design optimization of wing geometry and structure for flapping wing micro air vehicles. Aerospace Science and Technology, 2022, 123, 107451.	4.8	9
41	Computational investigation on ventilated supercavitating flows and its hydrodynamic characteristics around a high-speed underwater vehicle. Ocean Engineering, 2022, 249, 110865.	4.3	9
42	Higher-Order Discontinuous Galerkin-MLP Methods on Triangular and Tetrahedral Grids. , 2011, , .		8
43	Higher-order Multi-dimensional Limiting Strategy for Correction Procedure via Reconstruction. , 2014, , .		8
44	Integrated Fluid-Structure Simulation for Full Burning of a Solid-Propellant Rocket Interior. Journal of Propulsion and Power, 2014, 30, 883-900.	2.2	8
45	Numerical Investigation of Jet Interactions for a Lateral Thrust Jet Controlled Interceptor Operating at Medium Altitudes. International Journal of Aeronautical and Space Sciences, 2020, 21, 39-49.	2.0	8
46	Separation Control on NACA23012 using synthetic jet. , 2006, , .		6
47	Flowfield characteristics on a vent slot mixer in supersonic flow. Shock Waves, 2010, 20, 559-569.	1.9	6
48	Direct reconstruction method for discontinuous Galerkin methods on higher-order mixed-curved meshes III. Code optimization via tensor contraction. Computers and Fluids, 2021, 215, 104790.	2.5	6
49	A Science Cloud Resource Provisioning Model Using Statistical Analysis of Job History. , 2011, , .		5
50	Architecture-based and target-oriented algorithm optimization of high-order methods via complete-search tensor contraction. Computer Physics Communications, 2021, 264, 107988.	7.5	5
51	Adjoint Based Design Approach for Boundary Layer Ingestion Offset Intake. , 2009, , .		4
52	Adaptable scheduling schemes for scientific applications on science cloud. , 2010, , .		4
53	Adaptive Flow Separation Control Over an Asymmetric Airfoil. International Journal of Aeronautical and Space Sciences, 2018, 19, 305-315.	2.0	4
54	Extension of AUSM-type fluxes: from single-phase gas dynamics to multi-phase cryogenic flows at all speeds. Shock Waves, 2019, 29, 735-753.	1.9	4

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55	Comparing unified, pinned, and host/device memory allocations for memory-intensive workloads on Tegra SoC. Concurrency Computation Practice and Experience, 2021, 33, e6018.	2.2	4
56	Unsteady Flowfields Characteristics Around Two- and Three-dimensional Flapping Flight. , 2008, , .		3
57	Efficient Design Optimization of Vortex Generators in Subsonic Offset Inlet by Discrete Adjoint Approach. , 2011, , .		3
58	Compressibility Effects on Cavity Dynamics behind a Two-Dimensional Wedge. Journal of Marine Science and Engineering, 2020, 8, 39.	2.6	3
59	Simulation of the flapping wing aerial vehicle using flexible multibody dynamics. International Journal of Micro Air Vehicles, 2021, 13, 175682932110433.	1.3	3
60	A Cyber Environment for Engineering Cyber Education. , 2008, , .		2
61	Parametric Study on the Mixing Enhancement of Parallel Supersonic-subsonic Wakes Using Wall Cavities. Numerical Heat Transfer; Part A: Applications, 2008, 54, 367-389.	2.1	2
62	Supporting an interactive scientific workflow in aerodynamics analysis over e-Science environment. , 2011, , .		2
63	Direct Reconstruction Method for Volume Integration of Discontinuous Galerkin Methods on High-order Mixed-Curved Meshes. , 2019, , .		2
64	Computational Investigations of Side-Loads in a Thrust-Optimized Parabolic Nozzle during High-Altitude Testing. , 2020, , .		2
65	ACTFlow: A Target-Oriented Finite Volume Solver for All-Speed Compressible Turbulent Flow Simulations. , 2021, , .		2
66	Multi-Dimensional Limiting Process for Three Dimensional Compressible Flows. , 2005, , .		1
67	Multi-Dimensional Limiting Process on Triangular and Tetrahedral Meshes. , 2009, , .		1
68	Multi-dimensional Limiting Strategy for Higher-order CFD Methods - Progress and Issue (Invited). , 2015, , .		1
69	Higher-Order Multi-Dimensional Limiting Strategy for Subcell Resolution. , 2017, , .		1
70	Complete-search Tensor Contractions for Optimizing High-order Methods. , 2020, , .		1
71	Optimal Grid Resolution of Discontinuous Galerkin Methods for Implicit Large Eddy Simulation. , 2020, , .		1
72	Computations of Side Loads in a Thrust-Optimized Parabolic Nozzle During High-Altitude Testing. AIAA Journal, 2021, 59, 2299-2311.	2.6	1

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73	High-performance Discontinuous Galerkin Flow Solver using Direct Reconstruction Method. , 2021, , .		1
74	Multi-dimensional Limiting Process for Two- and Three-dimensional Flow Physics Analyses. , 2009, , 185-190.		1
75	Optimal Flow Control Using Unsteady Sensitivity Analysis. Transactions of the Japan Society for Aeronautical and Space Sciences, 2005, 48, 102-109.	0.7	1
76	CFD Researches on the e-AIRS : Korean e-Science Aerospace Research System. , 2007, , .		0
77	Numerical Simulation of Homogeneous Equilibrium Two-Phase Flows with Shock-Stable Schemes. , 2007, , .		0
78	Multi-Dimensional Limiting Process for Flow Physics Analyses on Structured and Unstructured Grids. , 2010, , 297-316.		0
79	Design Optimization of Vortex Generators for a Junction Vortex of Wing-Body Configuration by Discrete Adjoint Approach. , 2013, , .		0
80	Direct Reconstruction Method for Surface Integration of Discontinuous Galerkin Methods on High-order Mixed-Curved Meshes. , 2019, , .		0
81	Direct Reconstruction Method for Physical Domain-based Discontinuous Galerkin Formulation. , 2020, , .		0
82	Investigation of Turbulence Models for Multi-stage Launch Vehicle Analysis Including Base Flow. , 2007, , 277-284.		0
83	Design of CFD Problem Solving Environment based on Cactus Framework. , 2007, , 165-172.		0
84	CFD Researches on the e-AIRS : Korean e-Science Aerospace Research System. , 2007, , .		0
85	ANN-based Air Property Models up to 25,000 K for Hypersonic Equilibrium Flow Simulations. , 2022, , .		0