Chongam Kim

List of Publications by Year
in descending order

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	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
2	Computational investigation on ventilated supercavitating flows and its hydrodynamic characteristics around a high-speed underwater vehicle. Ocean Engineering, 2022, 249, 110865.	4.3	9
3	ANN-based Air Property Models up to 25,000 K for Hypersonic Equilibrium Flow Simulations. , 2022, , .		0
4	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
5	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
6	Computations of Side Loads in a Thrust-Optimized Parabolic Nozzle During High-Altitude Testing. AIAA Journal, 2021, 59, 2299-2311.	2.6	1
7	High-performance Discontinuous Galerkin Flow Solver using Direct Reconstruction Method. , 2021, , .		1
8	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
9	ACTFlow: A Target-Oriented Finite Volume Solver for All-Speed Compressible Turbulent Flow Simulations. , 2021, , .		2
10	A physics-based cavitation model ranging from inertial to thermal regimes. International Journal of Heat and Mass Transfer, 2021, 181, 121991.	4.8	15
11	Simulation of the flapping wing aerial vehicle using flexible multibody dynamics. International Journal of Micro Air Vehicles, 2021, 13, 175682932110433.	1.3	3
12	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
13	Computational investigation of flow separation in a thrust-optimized parabolic nozzle during high-altitude testing. Computers and Fluids, 2020, 197, 104363.	2.5	14
14	Pogo Accumulator Optimization Based on Multiphysics of Liquid Rockets and Neural Networks. Journal of Spacecraft and Rockets, 2020, 57, 809-822.	1.9	13
15	Effects of camber angle on aerodynamic performance of flapping-wing micro air vehicle. Journal of Fluids and Structures, 2020, 97, 103101.	3.4	22
16	Complete-search Tensor Contractions for Optimizing High-order Methods. , 2020, , .		1
17	Computational Investigations of Side-Loads in a Thrust-Optimized Parabolic Nozzle during High-Altitude Testing. , 2020, , .		2
18	Direct reconstruction method for discontinuous Galerkin methods on higher-order mixed-curved meshes II. Surface integration. Journal of Computational Physics, 2020, 416, 109514.	3.8	13

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19	Optimal Grid Resolution of Discontinuous Galerkin Methods for Implicit Large Eddy Simulation. , 2020, , .		1
20	Compressibility Effects on Cavity Dynamics behind a Two-Dimensional Wedge. Journal of Marine Science and Engineering, 2020, 8, 39.	2.6	3
21	Effects of Optimized Bleed System on Supersonic Inlet Performance and Buzz. Journal of Propulsion and Power, 2020, 36, 211-222.	2.2	26
22	Direct Reconstruction Method for Physical Domain-based Discontinuous Galerkin Formulation. , 2020, , .		0
23	Methods for compressible multiphase flows and their applications. Shock Waves, 2019, 29, 235-261.	1.9	19
24	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
25	Direct reconstruction method for discontinuous Galerkin methods on higher-order mixed-curved meshes I. Volume integration. Journal of Computational Physics, 2019, 395, 223-246.	3.8	18
26	Direct Reconstruction Method for Surface Integration of Discontinuous Galerkin Methods on High-order Mixed-Curved Meshes. , 2019, , .		0
27	Direct Reconstruction Method for Volume Integration of Discontinuous Galerkin Methods on High-order Mixed-Curved Meshes. , 2019, , .		2
28	Computations of Homogeneous Multiphase Real Fluid Flows at All Speeds. AIAA Journal, 2018, 56, 2623-2634.	2.6	18
29	High-order multi-dimensional limiting strategy with subcell resolution I. Two-dimensional mixed meshes. Journal of Computational Physics, 2018, 375, 1005-1032.	3.8	27
30	Adaptive Flow Separation Control Over an Asymmetric Airfoil. International Journal of Aeronautical and Space Sciences, 2018, 19, 305-315.	2.0	4
31	Design and analysis of the link mechanism for the flapping wing MAV using flexible multi-body dynamic analysis. International Journal of Micro Air Vehicles, 2017, 9, 253-269.	1.3	13
32	Higher-order multi-dimensional limiting process for DG and FR/CPR methods on tetrahedral meshes. Computers and Fluids, 2017, 154, 322-334.	2.5	23
33	Higher-Order Multi-Dimensional Limiting Strategy for Subcell Resolution. , 2017, , .		1
34	Hierarchical multi-dimensional limiting strategy for correction procedure via reconstruction. Journal of Computational Physics, 2016, 308, 57-80.	3.8	33
35	Multi-dimensional Limiting Strategy for Higher-order CFD Methods - Progress and Issue (Invited). , 2015, , .		1
36	Higher-order Multi-dimensional Limiting Strategy for Correction Procedure via Reconstruction. , 2014, , .		8

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37	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
38	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
39	Computational Study on Hysteretic Inlet Buzz Characteristics Under Varying Mass Flow Conditions. AIAA Journal, 2014, 52, 1357-1373.	2.6	35
40	Design Optimization of Vortex Generators for a Junction Vortex of Wing-Body Configuration by Discrete Adjoint Approach. , 2013, , .		0
41	Multi-dimensional limiting process for finite volume methods on unstructured grids. Computers and Fluids, 2012, 65, 8-24.	2.5	57
42	Adjoint-Based Design Optimization of Vortex Generator in an S-Shaped Subsonic Inlet. AIAA Journal, 2012, 50, 2492-2507.	2.6	31
43	Exploring multi-stage shape optimization strategy of multi-body geometries using Kriging-based model and adjoint method. Computers and Fluids, 2012, 68, 71-87.	2.5	13
44	Supporting an interactive scientific workflow in aerodynamics analysis over e-Science environment. , 2011, , .		2
45	Computational Investigation of Three-dimensional Unsteady Flowfield Characteristics around Insects' Flapping Flight. AIAA Journal, 2011, 49, 953-968.	2.6	17
46	Aerodynamic Effects of Structural Flexibility in Two-Dimensional Insect Flapping Flight. Journal of Aircraft, 2011, 48, 894-909.	2.4	28
47	Higher-Order Discontinuous Galerkin-MLP Methods on Triangular and Tetrahedral Grids. , 2011, , .		8
48	Efficient Design Optimization of Vortex Generators in Subsonic Offset Inlet by Discrete Adjoint Approach. , 2011, , .		3
49	A new finite volume method on junction coupling and boundary treatment for flow network system analyses. International Journal for Numerical Methods in Fluids, 2011, 65, 707-742.	1.6	17
50	A Science Cloud Resource Provisioning Model Using Statistical Analysis of Job History. , 2011, , .		5
51	Flowfield characteristics on a vent slot mixer in supersonic flow. Shock Waves, 2010, 20, 559-569.	1.9	6
52	Multi-dimensional limiting process for hyperbolic conservation laws on unstructured grids. Journal of Computational Physics, 2010, 229, 788-812.	3.8	136
53	Optimizing a Boundary-Layer-Ingestion Offset Inlet by Discrete Adjoint Approach. AIAA Journal, 2010, 48, 2008-2016.	2.6	27
54	Multi-Dimensional Limiting Process for Flow Physics Analyses on Structured and Unstructured Grids. , 2010, , 297-316.		0

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55	Adaptable scheduling schemes for scientific applications on science cloud. , 2010, , .		4
56	An axisymmetric computational model of generalized hydrodynamic theory for rarefied multi-species gas flows. Journal of Computational Physics, 2009, 228, 4088-4117.	3.8	13
57	Adjoint Based Design Approach for Boundary Layer Ingestion Offset Intake. , 2009, , .		4
58	Multi-Dimensional Limiting Process on Triangular and Tetrahedral Meshes. , 2009, , .		1
59	Multi-dimensional Limiting Process for Two- and Three-dimensional Flow Physics Analyses. , 2009, , 185-190.		1
60	Multi-dimensional limiting process for three-dimensional flow physics analyses. Journal of Computational Physics, 2008, 227, 6001-6043.	3.8	79
61	Computations of Homogeneous-Equilibrium Two-Phase Flows with Accurate and Efficient Shock-Stable Schemes. AIAA Journal, 2008, 46, 3012-3037.	2.6	37
62	Numerical Study on the Unsteady-Force-Generation Mechanism of Insect Flapping Motion. AIAA Journal, 2008, 46, 1835-1848.	2.6	40
63	Unsteady Flowfields Characteristics Around Two- and Three-dimensional Flapping Flight. , 2008, , .		3
64	A Cyber Environment for Engineering Cyber Education. , 2008, , .		2
65	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
66	Separation Motion of Strap-On Boosters with Base Flow and Turbulence Effects. Journal of Spacecraft and Rockets, 2008, 45, 485-494.	1.9	10
67	Aerodynamic Redesign Using Discrete Adjoint Approach on Overset Mesh System. Journal of Aircraft, 2008, 45, 1643-1653.	2.4	18
68	CFD Researches on the e-AIRS : Korean e-Science Aerospace Research System. , 2007, , .		0
69	Numerical Simulation of Homogeneous Equilibrium Two-Phase Flows with Shock-Stable Schemes. , 2007, , .		0
70	Separation control mechanism of airfoil using synthetic jet. Journal of Mechanical Science and Technology, 2007, 21, 1367-1375.	1.5	11
71	Automated design methodology of turbulent internal flow using discrete adjoint formulation. Aerospace Science and Technology, 2007, 11, 163-173.	4.8	44
72	Investigation of Turbulence Models for Multi-stage Launch Vehicle Analysis Including Base Flow. , 2007, , 277-284.		0

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73	Design of CFD Problem Solving Environment based on Cactus Framework. , 2007, , 165-172.		0
74	CFD Researches on the e-AIRS : Korean e-Science Aerospace Research System. , 2007, , .		0
75	Separation Control on NACA23012 using synthetic jet. , 2006, , .		6
76	Accurate, efficient and monotonic numerical methods for multi-dimensional compressible flows. Journal of Computational Physics, 2005, 208, 527-569.	3.8	105
77	Accurate, efficient and monotonic numerical methods for multi-dimensional compressible flows. Journal of Computational Physics, 2005, 208, 570-615.	3.8	248
78	Optimal Shape Design of the S-Shaped Subsonic Intake Using NURBS. , 2005, , .		9
79	Multi-Dimensional Limiting Process for Three Dimensional Compressible Flows. , 2005, , .		1
80	Optimal Flow Control Using Unsteady Sensitivity Analysis. Transactions of the Japan Society for Aeronautical and Space Sciences, 2005, 48, 102-109.	0.7	1
81	Cures for the shock instability: Development of a shock-stable Roe scheme. Journal of Computational Physics, 2003, 185, 342-374.	3.8	219
82	Numerical Analysis on Separation Dynamics of Strap-On Boosters in the Atmosphere. Journal of Spacecraft and Rockets, 2002, 39, 439-446.	1.9	20
83	Methods for the Accurate Computations of Hypersonic Flows. Journal of Computational Physics, 2001, 174, 38-80.	3.8	465
84	Sensitivity Analysis for the Navier-Stokes Equations with Two-Equation Turbulence Models. AIAA Journal, 2001, 39, 838-845.	2.6	56
85	Parallel Computations of High-Lift Airfoil Flows Using Two-Equation Turbulence Models. AIAA Journal, 2000, 38, 1360-1368.	2.6	37