Shigeru Obayashi

List of Publications by Year
in descending order

252	5,643	87888 38	114465 63
papers	citations	h-index	g-index

253	253	253	2891
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Convergence acceleration of a Navier-Stokes solver for efficient static aeroelastic computations. AIAA Journal, 1995, 33, 1134-1141.	2.6	312
2	Self-images in the video monitor coded by monkey intraparietal neurons. Neuroscience Research, 2001, 40, 163-173.	1.9	211
3	Functional Brain Mapping of Monkey Tool Use. NeuroImage, 2001, 14, 853-861.	4.2	205
4	Flowfield of a lifting rotor in hover - A Navier-Stokes simulation. AIAA Journal, 1992, 30, 2371-2378.	2.6	171
5	Novel peripheral benzodiazepine receptor ligand [11C]DAA1106 for PET: An imaging tool for glial cells in the brain. Synapse, 2004, 52, 283-291.	1.2	148
6	Numerical simulation of the integrated space shuttle vehicle in ascent. , 1988, , .		146
7	Development of a New Radioligand, N-(5-Fluoro-2-phenoxyphenyl)-N-(2-[18F]fluoroethyl-5-methoxybenzyl)acetamide, for PET Imaging of Peripheral Benzodiazepine Receptor in Primate Brain. Journal of Medicinal Chemistry, 2004, 47, 2228-2235.	6.4	139
8	Visualization and Data Mining of Pareto Solutions Using Self-Organizing Map. Lecture Notes in Computer Science, 2003, , 796-809.	1.3	116
9	Transonic Axial-Flow Blade Optimization: Evolutionary Algorithms/Three-Dimensional Navier-Stokes Solver. Journal of Propulsion and Power, 2004, 20, 612-619.	2.2	104
10	The effects of electromyography-controlled functional electrical stimulation on upper extremity function and cortical perfusion in stroke patients. Clinical Neurophysiology, 2013, 124, 2008-2015.	1.5	101
11	Genetic optimization of target pressure distributions for inverse design methods. AIAA Journal, 1996, 34, 881-886.	2.6	99
12	Subjective image of invisible hand coded by monkey intraparietal neurons. NeuroReport, 2000, 11, 3499-3505.	1.2	95
13	Efficient Search for Trade-Offs by Adaptive Range Multi-Objective Genetic Algorithms. Journal of Aerospace Computing, Information, and Communication, 2005, 2, 44-64.	0.8	92
14	High-resolution upwind scheme for vortical-flow simulations. Journal of Aircraft, 1989, 26, 1123-1129.	2.4	87
15	Aerodynamic Optimization of Supersonic Transport Wing Using Unstructured Adjoint Method. AIAA Journal, 2001, 39, 1011-1020.	2.6	86
16	Multiobjective evolutionary computation for supersonic wing-shape optimization. IEEE Transactions on Evolutionary Computation, 2000, 4, 182-187.	10.0	82
17	A data assimilation methodology for reconstructing turbulent flows around aircraft. Journal of Computational Physics, 2015, 283, 559-581.	3.8	81
18	Navier-Stokes Optimization of Supersonic Wings with Four Objectives Using Evolutionary Algorithm. Journal of Aircraft, 2002, 39, 621-629.	2.4	76

#	Article	IF	Citations
19	Data Mining for Aerodynamic Design Space. Journal of Aerospace Computing, Information, and Communication, 2005, 2, 452-469.	0.8	75
20	11C-AC-5216: A Novel PET Ligand for Peripheral Benzodiazepine Receptors in the Primate Brain. Journal of Nuclear Medicine, 2007, 48, 1853-1861.	5.0	73
21	Optimization of Combustion Chamber for Diesel Engine Using Kriging Model. Journal of Fluid Science and Technology, 2006, 1, 138-146.	0.6	72
22	Development and investigation of efficient GA/PSO-HYBRID algorithm applicable to real-world design optimization. IEEE Computational Intelligence Magazine, 2009, 4, 36-44.	3.2	70
23	Effectiveness of jet location on mixing characteristics inside a cavity in supersonic flow. Experimental Thermal and Fluid Science, 2014, 52, 59-67.	2.7	69
24	Multiobjective Genetic Algorithm for Multidisciplinary Design of Transonic Wing Planform. Journal of Aircraft, 1997, 34, 690-693.	2.4	68
25	Real-coded adaptive range genetic algorithm applied to transonic wing optimization. Applied Soft Computing Journal, 2001, 1, 179-187.	7.2	68
26	Improvements in efficiency and reliability for Navier-Stokes computations using the LU-ADI factorization algorithm. , 1986, , .		61
27	Organization of the marmoset cerebellum in threeâ€dimensional space: Lobulation, aldolase C compartmentalization and axonal projection. Journal of Comparative Neurology, 2010, 518, 1764-1791.	1.6	56
28	Comparison of Optimization Algorithms for Aerodynamic Shape Design. AIAA Journal, 1997, 35, 1413-1415.	2.6	55
29	Practical applications of new LU-ADI scheme for the three-dimensional Navier-Stokes computation of transonic viscous flows. , 1986, , .		54
30	Freestream capturing for moving coordinates in three dimensions. AIAA Journal, 1992, 30, 1125-1128.	2.6	51
31	Multidisciplinary Design Optimization and Data Mining for Transonic Regional-Jet Wing. Journal of Aircraft, 2007, 44, 1100-1112.	2.4	49
32	Measurement sensitivity and resolution for background oriented schlieren during image recording. Journal of Visualization, 2013, 16, 201-207.	1.8	47
33	Expected Improvement of Penalty-Based Boundary Intersection for Expensive Multiobjective Optimization. IEEE Transactions on Evolutionary Computation, 2017, 21, 898-913.	10.0	47
34	Multi-Objective Design Exploration for Aerodynamic Configurations. , 2005, , .		46
35	Maternal immune activation by polyriboinosinic-polyribocytidilic acid injection produces synaptic dysfunction but not neuronal loss in the hippocampus of juvenile rat offspring. Brain Research, 2010, 1363, 170-179.	2.2	46
36	Practical formulation of a positively conservative scheme. AIAA Journal, 1994, 32, 1093-1095.	2.6	43

#	Article	IF	Citations
37	Niching and elitist models for MOGAs. Lecture Notes in Computer Science, 1998, , 260-269.	1.3	43
38	Effects of dual jets distance on mixing characteristics and flow path within a cavity in supersonic crossflow. International Journal of Heat and Fluid Flow, 2014, 50, 254-262.	2.4	43
39	An approximate LU factorization method for the compressible Navier-Stokes equations. Journal of Computational Physics, 1986, 63, 157-167.	3.8	42
40	Possible mechanism for transfer of motor skill learning: implication of the cerebellum. Cerebellum, 2004, 3, 204-211.	2.5	41
41	Numerical solutions of forward-flight rotor flow using an upwind method. Journal of Aircraft, 1991, 28, 374-380.	2.4	40
42	Updating Kriging Surrogate Models Based on the Hypervolume Indicator in Multi-Objective Optimization. Journal of Mechanical Design, Transactions of the ASME, 2013, 135, .	2.9	40
43	Knowledge Discovery for Flyback-Booster Aerodynamic Wing Using Data Mining. Journal of Spacecraft and Rockets, 2008, 45, 975-987.	1.9	39
44	Navier-Stokes simulations of transonic flows over a practical wing configuration. AIAA Journal, 1987, 25, 369-370.	2.6	38
45	Multidisciplinary Design Optimization of Wing Shape for a Small Jet Aircraft Using Kriging Model. , 2006, , .		38
46	Transverse jet-cavity interactions with the influence of an impinging shock. International Journal of Heat and Fluid Flow, 2015, 53, 146-155.	2.4	38
47	Streamwise upwind algorithm for computing unsteady transonic flows past oscillating wings. AIAA Journal, 1991, 29, 1668-1677.	2.6	35
48	Topology optimization of fluid problems using genetic algorithm assisted by the Kriging model. International Journal for Numerical Methods in Engineering, 2017, 109, 514-532.	2.8	35
49	Multiobjective genetic algorithm applied to aerodynamic design of cascade airfoils. IEEE Transactions on Industrial Electronics, 2000, 47, 211-216.	7.9	34
50	Helicopter Rotor Shape Optimization for the Improvement of Aeroacoustic Performance in Hover. Journal of Aircraft, 2010, 47, 1770-1783.	2.4	33
51	Multi-objective optimization and design rule mining for an aerodynamically efficient and stable centrifugal impeller with a vaned diffuser. Engineering Optimization, 2010, 42, 271-293.	2.6	32
52	Feasibility of skin-friction diagnostics based on surface pressure gradient field. Measurement Science and Technology, 2016, 27, 125304.	2.6	32
53	Plate-Angle Effects on Acoustic Waves from Supersonic Jets Impinging on Inclined Plates. AIAA Journal, 2016, 54, 816-827.	2.6	32
54	Macaque prefrontal activity associated with extensive tool use. NeuroReport, 2002, 13, 2349-2354.	1.2	31

#	Article	IF	Citations
55	Aileron Buzz Simulation Using an Implicit Multiblock Aeroelastic Solver. Journal of Aircraft, 2003, 40, 580-589.	2.4	31
56	Application of Local Correlation-Based Transition Model to Flows Around Wings. , 2006, , .		28
57	Navier-Stokes simulations of transonic flows over a wing-fuselage combination. AIAA Journal, 1987, 25, 1587-1596.	2.6	27
58	Numerical Analyses of Discrete Gust Response for an Aircraft. Journal of Aircraft, 2004, 41, 1353-1359.	2.4	26
59	Aerodynamic Shape Optimization of Supersonic Wings by Adaptive Range Multiobjective Genetic Algorithms. Lecture Notes in Computer Science, 2001, , 639-652.	1.3	24
60	Fronto-parieto-cerebellar interaction associated with intermanual transfer of monkey tool-use learning. Neuroscience Letters, 2003, 339, 123-126.	2.1	24
61	Optimization of passive grooved micromixers based on genetic algorithm and graph theory. Microfluidics and Nanofluidics, 2019, 23, 1.	2.2	24
62	Numerical simulation of underexpanded plumes using upwind algorithms. , 1988, , .		23
63	High-Fidelity Multidisciplinary Design Optimization of Aerostructural Wing Shape for Regional Jet. , 2005, , .		23
64	Numerical study on jet-wake vortex interaction of aircraft configuration. Aerospace Science and Technology, 2017, 70, 615-625.	4.8	23
65	Practical Implementation of Robust Design Assisted by Response Surface Approximation and Visual Data-Mining. Journal of Mechanical Design, Transactions of the ASME, 2009, 131, .	2.9	22
66	Aerodynamic properties of a shuttlecock with spin at high Reynolds number. Procedia Engineering, 2011, 13, 271-277.	1.2	22
67	Exhaust manifold design with tapered pipes using divided range MOGA. Engineering Optimization, 2004, 36, 149-163.	2.6	21
68	Multi-Objective Design Exploration and Its Application to Regional-Jet Wing Design. Transactions of the Japan Society for Aeronautical and Space Sciences, 2007, 50, 1-8.	0.7	21
69	Application of hybrid evolutionary algorithms to low exhaust emission diesel engine design. Engineering Optimization, 2008, 40, 1-16.	2.6	21
70	Kriging surrogate model with coordinate transformation based on likelihood and gradient. Journal of Global Optimization, 2017, 68, 827-849.	1.8	21
71	Multi-Objective Design Exploration of a Centrifugal Impeller Accompanied With a Vaned Diffuser. , 2007, , 939.		19
72	Multi-Objective Design Optimization for a Steam Turbine Stator Blade Using LES and GA. Journal of Computational Science and Technology, 2011, 5, 134-147.	0.4	19

#	Article	IF	Citations
73	Drag reduction of a pickup truck by a rear downward flap. International Journal of Automotive Technology, 2011, 12, 369-374.	1.4	19
74	Kriging-surrogate-based optimization considering expected hypervolume improvement in non-constrained many-objective test problems. , 2013, , .		19
75	Navier-Stokes computations for oscillating control surfaces. Journal of Aircraft, 1994, 31, 631-636.	2.4	18
76	Real-Coded Adaptive Range Genetic Algorithm and Its Application to Aerodynamic Design.. JSME International Journal Series A-Solid Mechanics and Material Engineering, 2000, 43, 124-129.	0.4	18
77	Knowledge Discovery in Aerodynamic Design Space for Flyback-Booster Wing Using Data Mining. , 2006, , .		18
78	Design Exploration of Aerodynamic Wing Shape for Reusable Launch Vehicle Flyback Booster. Journal of Aircraft, 2006, 43, 832-836.	2.4	18
79	Studies on Design Optimization of Coronary Stents. Journal of Medical Devices, Transactions of the ASME, 2008, 2, .	0.7	18
80	Measurement-Integrated Simulation of Clear Air Turbulence Using a Four-dimensional Variational Method. Journal of Aircraft, 2008, 45, 1217-1229.	2.4	18
81	Waveletâ€based data compression for flow simulation on blockâ€structured Cartesian mesh. International Journal for Numerical Methods in Fluids, 2013, 73, 462-476.	1.6	18
82	Unsteady shock-vortex interaction on a flexible delta wing. Journal of Aircraft, 1992, 29, 790-798.	2.4	17
83	Genetic optimization of target pressure distributions for inverse design methods. , 1995, , .		17
84	Experimental and Computational Fluid Dynamics Around Supersonic Biplane for Sonic-Boom Reduction. , 2007, , .		17
85	Hypofrontal activity during word retrieval in older adults: A near-infrared spectroscopy study. Neuropsychologia, 2013, 51, 418-424.	1.6	17
86	Real-Coded Adaptive Range Genetic Algorithm Applied to Transonic Wing Optimization. Lecture Notes in Computer Science, 2000, , 712-721.	1.3	17
87	Kriging-based Probabilistic Method for Constrained Multi-Objective Optimization Problem. , 2004, , .		16
88	A Study of Busemann-Type Biplane for Avoiding Choked Flow. , 2007, , .		16
89	Sonic Boom Variability Due to Homogeneous Atmospheric Turbulence. Journal of Aircraft, 2009, 46, 1886-1893.	2.4	16
90	Design optimization of a sport shoe sole structure by evolutionary computation and finite element method analysis. Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology, 2011, 225, 179-188.	0.7	16

#	Article	IF	Citations
91	Aerodynamic Properties and Flow Behavior for a Badminton Shuttlecock with Spin at High Reynolds Numbers. Procedia Engineering, 2012, 34, 104-109.	1.2	16
92	Comparison of the criteria for updating Kriging response surface models in multi-objective optimization. , 2012, , .		16
93	Extensions of Overset Unstructured Grids to Multiple Bodies in Contact. Journal of Aircraft, 2006, 43, 52-57.	2.4	15
94	Data Mining for Multidisciplinary Design Space of Regional-Jet Wing. Journal of Aerospace Computing, Information, and Communication, 2007, 4, 1019-1036.	0.8	15
95	Two-Dimensional Optimization of a Stent for an Aneurysm. Journal of Medical Devices, Transactions of the ASME, 2010, 4, .	0.7	15
96	Euler/Navier-Stokes Optimization of Supersonic Wing Design Based on Evolutionary Algorithm. AIAA Journal, 1999, 37, 1327-1328.	2.6	14
97	Fractional factorial design of genetic coding for aerodynamic optimization. , 1999, , .		14
98	Flap-Deflection Optimization for Transonic Cruise Performance Improvement of Supersonic Transport Wing. Journal of Aircraft, 2001, 38, 709-717.	2.4	14
99	Low-Boom and Low-Drag Optimization of the Twin Engine Version of Silent Supersonic Business Jet. Journal of Fluid Science and Technology, 2008, 3, 576-585.	0.6	14
100	Kriging-Model-Based Multi-Objective Robust Optimization and Trade-Off Rule Mining of a Centrifugal Fan with Dimensional Uncertainty. Journal of Computational Science and Technology, 2009, 3, 196-211.	0.4	14
101	Vehicle Aerodynamics Simulation for the Next Generation on the K Computer: Part 2 Use of Dirty CAD Data with Modified Cartesian Grid Approach. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 7, 528-537.	0.4	14
102	Assessment of probability density function based on POD reduced-order model for ensemble-based data assimilation. Fluid Dynamics Research, 2015, 47, 051403.	1.3	14
103	International journal of computational fluid dynamics real-time prediction of unsteady flow based on POD reduced-order model and particle filter. International Journal of Computational Fluid Dynamics, 2016, 30, 285-306.	1.2	14
104	Inverse Design Optimization of Transonic Wings Based on Multi-Objective Genetic Algorithms. AIAA Journal, 1999, 37, 1656-1662.	2.6	13
105	Overset Unstructured Grids Method for Viscous Flow Computations. AIAA Journal, 2006, 44, 1617-1623.	2.6	13
106	Wind Tunnel Testing on Start/Unstart Characteristics of Finite Supersonic Biplane Wing. International Journal of Aerospace Engineering, 2013, 2013, 1-10.	0.9	13
107	Kriging model based many-objective optimization with efficient calculation of expected hypervolume improvement. , 2014, , .		13
108	Assimilation Experiment of Lidar Measurements for Wake Turbulence. Journal of Fluid Science and Technology, 2008, 3, 512-518.	0.6	12

#	Article	IF	Citations
109	A Study on Many-Objective Optimization Using the Kriging-Surrogate-Based Evolutionary Algorithm Maximizing Expected Hypervolume Improvement. Mathematical Problems in Engineering, 2015, 2015, 1-15.	1.1	12
110	Aerodynamic Optimization of Near-future High-wing Aircraft. Transactions of the Japan Society for Aeronautical and Space Sciences, 2015, 58, 73-82.	0.7	12
111	Genetic algorithm for aerodynamic inverse optimization problems. , 1995, , .		11
112	Navier-Stokes optimization of supersonic wings with four design objectives using evolutionary algorithm. , 2001, , .		11
113	Self-organizing map of Pareto solutions obtained from multiobjective supersonic wing design. , 2002, , .		11
114	Low-Boom Design Optimization for SST Canard-Wing-Fuselage Configuration. , 2003, , .		11
115	Aerodynamic Optimization Design with Kriging Model. Transactions of the Japan Society for Aeronautical and Space Sciences, 2005, 48, 161-168.	0.7	11
116	Functional Organization of Monkey Brain for Abstract Operation. Cortex, 2007, 43, 389-396.	2.4	11
117	Multiobjective Design Optimization of Merging Configuration for an Exhaust Manifold of a Car Engine. Lecture Notes in Computer Science, 2002, , 281-287.	1.3	11
118	Automated Aerodynamic Optimization System for SST Wing-Body Configuration. Transactions of the Japan Society for Aeronautical and Space Sciences, 2004, 46, 230-237.	0.7	11
119	Application of a streamwise upwind algorithm for unsteady transonic computations over oscillating wings. , 1990, , .		10
120	Navier-Stokes computations for oscillating control surfaces. , 1992, , .		10
121	Cascade airfoil design by multiobjective genetic algorithms. , 1997, , .		10
122	Inverse design method for wings of supersonic transport. , 1998, , .		10
123	Advanced Fluid Information. Multiblock Navier-Stokes Solver for Wing/Fuselage Transport Aircraft.. JSME International Journal Series B, 2002, 45, 85-90.	0.3	10
124	CFD Visualization of Second Primary Vortex Structure on a 65-Degree Delta Wing. , 2004, , .		10
125	High-Fidelity Multidisciplinary Design Optimization of Wing Shape for Regional Jet Aircraft. Lecture Notes in Computer Science, 2005, , 621-635.	1.3	10
126	Assessment of some experimental and image analysis factors for background-oriented schlieren measurements. Applied Optics, 2012, 51, 7554.	1.8	10

#	Article	IF	Citations
127	Adaptive mesh refinement and load balancing based on multi-level block-structured Cartesian mesh. International Journal of Computational Fluid Dynamics, 2017, 31, 476-487.	1.2	10
128	Pareto Solutions of Multipoint Design of Supersonic Wings Using Evolutionary Algorithms. , 2002, , 3-15.		10
129	Airport Terrain-Induced Turbulence Simulations Integrated with Weather Prediction Data. Transactions of the Japan Society for Aeronautical and Space Sciences, 2013, 56, 286-292.	0.7	10
130	Investigation of Supersonic Wing Shape Using Busemann Biplane Airfoil. , 2007, , .		9
131	Shock stand-off distance of a solid sphere decelerating in transonic velocity range. Shock Waves, 2011, 21, 483-489.	1.9	9
132	Kriging/RBF-Hybrid Response Surface Methodology for Highly Nonlinear Functions. Journal of Computational Science and Technology, 2012, 6, 81-96.	0.4	9
133	Efficient Global Optimization of Vortex Generators on a Supercritical Infinite Wing. Journal of Aircraft, 2016, 53, 1670-1679.	2.4	9
134	Development of Magnetic Suspension and Balance System for Intermittent Supersonic Wind Tunnels. AIAA Journal, 2016, 54, 1277-1286.	2.6	9
135	Reduction of Drag Penalty by means of Plain Flaps in the Boomless Busemann Biplane. International Journal of Emerging Multidisciplinary Fluid Sciences, 2009, 1, 141-164.	0.5	9
136	A Kriging-based probabilistic optimization method with an adaptive search region. Engineering Optimization, 2006, 38, 541-555.	2.6	8
137	Nonlinear Aeroelastic Analysis of Control Surface with Freeplay Using Computational-Fluid-Dynamics-Based Reduced-Order Models. Journal of Aircraft, 2015, 52, 569-583.	2.4	8
138	Aerodynamic optimization with evolutionary algorithms. , 1996, , .		7
139	Inverse optimization of transonic wing shape for mid-size regional aircraft. , 1998, , .		7
140	High-Fidelity Swept and Leaned Rotor Blade Design Optimization Using Evolutionary Algorithm. , 2003, , .		7
141	Monkey brain areas underlying remote-controlled operation. European Journal of Neuroscience, 2004, 19, 1397-1407.	2.6	7
142	Design under Uncertainties of Wings in Transonic Field. JSME International Journal Series B, 2005, 48, 218-223.	0.3	7
143	Reducing drag penalty in the three-dimensional supersonic biplane. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2009, 223, 891-899.	1.3	7
144	Generation mechanism of precursor electrons ahead of a hypersonic shock wave in argon. Journal of Fluid Science and Technology, 2014, 9, JFST0070-JFST0070.	0.6	7

#	Article	IF	Citations
145	Multipoint Design Optimization of Vortex Generators on Transonic Swept Wings. Journal of Aircraft, 2019, 56, 1291-1302.	2.4	7
146	A simple collision algorithm for arbitrarily shaped objects in particleâ€resolved flow simulation using an immersed boundary method. International Journal for Numerical Methods in Fluids, 2020, 92, 1256-1273.	1.6	7
147	Evolutionary Multiobjective Optimization of Steel Structural Systems in Tall Buildings. , 2007, , 604-618.		7
148	Toward the Navier-Stokes analysis of transport aircraft configurations. , 1987, , .		6
149	Improvements and applications of a streamwise upwind algorithm. , 1989, , .		6
150	New Blunt Trailing-Edge Airfoil Design by Inverse Optimization Method. Journal of Aircraft, 1997, 34, 255-257.	2.4	6
151	The Application of MDO Technologies to the Design of a High Performance Small Jet Aircraft - Lessons Learned and Some Practical Concerns. , 2005, , .		6
152	Kriging/RBF-hybrid response surface method for highly nonlinear functions. , 2011, , .		6
153	Efficient Global Optimization of Vortex Generators on a Super Critical Infinite-Wing Using Kriging-Based Surrogate Models. , 2014, , .		6
154	Validation of measurement accuracy for near-field pressure around supersonic projectiles in a ballistic range. Measurement: Journal of the International Measurement Confederation, 2015, 67, 24-33.	5.0	6
155	Aerodynamic Measurements of AGARD-B Model at High Angles of Attack by 1-m Magnetic Suspension and Balance System. , 2018, , .		6
156	Direct Numerical Simulation of Gasâ€“Particle Flows with Particleâ€“Wall Collisions Using the Immersed Boundary Method. Applied Sciences (Switzerland), 2018, 8, 2387.	2.5	6
157	Kriging Surrogate Model Enhanced by Coordinate Transformation of Design Space Based on Eigenvalue Decomposition. Lecture Notes in Computer Science, 2015, , 321-335.	1.3	6
158	INTRAPARIETAL BIMODAL NEURONES DELINEATING EXTRINSIC SPACE THROUGH INTRINSIC ACTIONS. Psychologia, 2004, 47, 63-78.	0.3	6
159	Real-time estimation of airflow vector based on lidar observations for preview control. Atmospheric Measurement Techniques, 2020, 13, 6543-6558.	3.1	6
160	Unsteady shock-vortex interaction on a flexible delta wing. , 1991, , .		5
161	Navier-Stokes computations on full wing-body configuration with oscillating control surfaces. Journal of Aircraft, 1995, 32, 1227-1233.	2.4	5
162	Automated Aerodynamic Optimization System for SST WIng-Body Configuration. , 2002, , .		5

#	Article	IF	Citations
163	Numerical Simulation: Supersonic Flow Around Wing-Body Configuration with Integrated Engine Nacelle. AIAA Journal, 2003, 41, 213-217.	2.6	5
164	Sonic Boom Estimation using the Multipole Method for Free-Flight Experiments. , 2014, , .		5
165	Wavenumber Optimized Immersed Boundary Method for Aeroacoustic Analysis Based on Cartesian Mesh. AIAA Journal, 2016, 54, 2988-3001.	2.6	5
166	Flow characteristics of a pickup truck with regard to the bed geometry variation. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2010, 224, 881-891.	1.9	4
167	Simultaneous visualization of surface and flow field for a projectile. Journal of Visualization, 2013, 16, 331-340.	1.8	4
168	Aerodynamic Characteristics and Effects of Winglets of the Boomless Tapered Supersonic Biplane during the Starting Process. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2013, 11, 17-26.	0.2	4
169	Real-Time Flow Prediction of Low-Level Atmospheric Turbulence. , 2015, , .		4
170	Analysis of sonic boom propagation based on the KZK equation. , 2015, , .		4
171	Nowcasting algorithm for wind fields using ensemble forecasting and aircraft flight data. Meteorological Applications, 2018, 25, 365-375.	2.1	4
172	Introduction of 1-m MSBS in Tohoku University, New Device for Aerodynamics Measurements of the Sports Equipment. Proceedings (mdpi), 2018, 2, .	0.2	4
173	Inverse optimization method for blunt-trailing-edge airfoils. , 1997, , 117-122.		3
174	Transonic Wing Shape Optimization Based on Evolutionary Algorithms. Lecture Notes in Computer Science, 2000, , 172-181.	1.3	3
175	A transonic wing inverse design capability for complete aircraft configurations. , 2001, , .		3
176	Multi-objective optimization for aerodynamic designs by using ARMOGAs. , 0, , .		3
177	Ballistic Range Experiment on the Low Sonic Boom Characteristics of Supersonic Biplane. , 2010, , .		3
178	Calculation of Unsteady Control Surface Aerodynamics using Reduced-Order Models. , 2011, , .		3
179	Implementation of visual data mining for unsteady blood flow field in an aortic aneurysm. Journal of Visualization, 2011, 14, 393-398.	1.8	3
180	Multipoint Design of Vortex Generators on a Swept Infinite-Wing under Cruise and Critical Condition. , 2015, , .		3

#	Article	IF	Citations
181	Filtering Algorithm of Airborne Doppler Lidar Measurements for Improved Wind Estimation. Transactions of the Japan Society for Aeronautical and Space Sciences, 2015, 58, 149-155.	0.7	3
182	Hemodynamic Response of the Supplementary Motor Area during Locomotor Tasks with Upright versus Horizontal Postures in Humans. Neural Plasticity, 2016, 2016, 1-8.	2.2	3
183	Electron density measurements behind a hypersonic shock wave in argon. Journal of Fluid Science and Technology, 2016, 11, JFST0005-JFST0005.	0.6	3
184	Numerical Simulation of Cascade Flows Using Block-Structured Cartesian Mesh. , 2017, , .		3
185	Topology and Sizing Optimization of Micromixers Using Graph-Theoretical Representation and Genetic Algorithm. , 2017, , .		3
186	Euler/Navier-Stokes Optimization of Supersonic Wing Design Based on Evolutionary Algorithm. , 1999, , 249-256.		3
187	CFD Analysis Based Evaluation of Aerodynamic Characteristics for Supersonic Biplane with Finite Span Length. Journal of the Japan Society for Aeronautical and Space Sciences, 2009, 57, 32-38.	0.1	3
188	Virtual zone Navier-Stokes computations for oscillating control surfaces. , 1993, , .		2
189	Navier-Stokes computations on full-span wing-body configuration withoscillating control surfaces. , 1993, , .		2
190	Inverse optimization of transonic wing design using multiobjective genetic algorithms. Inverse Problems in Science and Engineering, 1998, 6, 317-330.	0.5	2
191	Inverse optimization of supersonic wing design with twist specification. Inverse Problems in Science and Engineering, 1999, 7, 519-535.	0.5	2
192	Numerical simulation of supersonic flow around wing-body configuration with integrated engine nacelle. , 2002, , .		2
193	Improvement of Nonlinear Lateral Characteristics of Lifting-Body Type Reentry Vehicle Using Optimization Algorithm. , 2007, , .		2
194	Optimization of Nonlinear Lateral Characteristic of Lifting-Body Type Reentry Vehicle. Journal of Aerospace Computing, Information, and Communication, 2009, 6, 239-255.	0.8	2
195	Efficient Aeroelastic Analysis Using Unstructured CFD Method and Reduced-Order Unsteady Aerodynamic Model. , 2009, , .		2
196	Material design optimization for a sport shoe sole by evolutionary computation and FEM analysis. , 2010, , .		2
197	Aerodynamic Performance of the Three-Dimensional Lifting Supersonic Biplane. Journal of Aircraft, 2010, 47, 983-991.	2.4	2
198	Global Sonic Boom Overpressure Variation from Seasonal Temperature, Pressure, and Density Gradients. Journal of Aircraft, 2013, 50, 1933-1938.	2.4	2

#	Article	IF	Citations
199	Sensitivity Analysis of Unsteady Flow Fields and Impact of Measurement Strategy. Mathematical Problems in Engineering, 2014, 2014, 1-12.	1.1	2
200	Large Eddy Simulation of Wake Vortices under Influences of Hangar Wake and the Ground. , 2018, , .		2
201	Influence of Turbulence Statistics on Stochastic Jet-Noise Prediction with Synthetic Eddy Method. Journal of Aircraft, 2019, 56, 2342-2356.	2.4	2
202	Knowledge Extraction for Structural Design of Regional Jet Horizontal Tail Using Multi-Objective Design Exploration (MODE). Lecture Notes in Computer Science, 2013, , 656-668.	1.3	2
203	Streamline pair selection for comparative flow field visualization. Visual Computing for Industry, Biomedicine, and Art, 2020, 3, 20.	3.7	2
204	339 Construction of a Data Mining Method for Unsteady CFD Results. The Proceedings of the Computational Mechanics Conference, 2006, 2006.19, 431-432.	0.0	2
205	Multi-Objective Optimization and Data Mining. Journal of the Society of Mechanical Engineers, 2006, 109, 383-385.	0.0	2
206	Two-Point Implicit Scheme for Euler Equations. Journal of the Physical Society of Japan, 1983, 52, 1525-1530.	1.6	1
207	Use of high-resolution upwind scheme for vortical flow simulations. , 1989, , .		1
208	A supersonic inverse wing design method and its application to Japanese SST. , 1998, , 79-84.		1
209	Inverse Design of Supersonic Airfoils Using Integral Equations. Journal of Aircraft, 1999, 36, 606-608.	2.4	1
210	Drag Characteristics of a Low-Drag Low-Boom Supersonic Formation Flying Concept. , 2005, , .		1
211	Wave Drag Characteristics of a Low-Drag Supersonic Formation Flying Concept. Journal of Aircraft, 2007, 44, 675-679.	2.4	1
212	Knowledge Discovery for Transonic Regional-Jet Wing through Multidisciplinary Design Exploration. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2008, 2, 396-407.	0.7	1
213	Design of Supersonic Biplane Aircraft Concerning Sonic Boom Minimization. , 2010, , .		1
214	Development of a Sensitivity-Adjustable Three-Component Force Balance and Its Application to Wind Tunnel Testing. Journal of Fluid Science and Technology, 2013, 8, 209-218.	0.6	1
215	Parametric Study of Vortex Generators on a Super Critical Infinite-Wing with Shock-Induced Separation. , 2013, , .		1
216	Numerical Simulation of Jet-Wake Vortex Interaction. , 2014, , .		1

#	Article	IF	Citations
217	Aerodynamic Optimization of High-Wing Configuration for Near Future Aircraft. , 2014, , .		1
218	Aerodynamic Analysis of NASA Common Research Model by Block-Structured Cartesian Mesh. , 2018, , .		1
219	Zonal Reduced-Order Modelling Toward Prediction of Transitional Flow Fields. Journal of Physics: Conference Series, 2018, 1036, 012012.	0.4	1
220	Data Assimilation for Clear Air Turbulence by Upstream LIDAR Observation. , 2020, , .		1
221	Measurement of the Aerodynamic Forces Acting on a Non-Spinning Javelin Using an MSBS. Proceedings (mdpi), 2020, 49, 144.	0.2	1
222	Aerodynamic Characteristics of Turbojav Measured with 1-m Magnetic Suspension and Balance System. , 2021, , .		1
223	Parametric Study on Waverider Configurations at Low-supersonic Speed for Low-boom Supersonic Transport. Transactions of the Japan Society for Aeronautical and Space Sciences, 2021, 64, 325-334.	0.7	1
224	Unsteady Navier-Stokes simulation of the canard-wing-body ramp motion. , 1993, , .		0
225	Higher-order accuracy for upwind methods by using the compatibility equations. AIAA Journal, 1993, 31, 251-256.	2.6	0
226	Tradeoff Analysis of Aerodynamic Wing Design for RLV. , 1996, , 129-136.		0
227	Exhaust Manifold Design for a Car Engine Based on Engine Cycle Simulation. , 2003, , 475-482.		0
228	Numerical Analyses of Discrete Gust Response for a Flexible Aircraft. , 2003, , .		0
229	Validation of Drag Estimation on Wing-Fuselage Configuration for a Navier-Stokes Solver. , 2003, , .		0
230	Numerical Simulation of Supersonic Flow around Wing-Body Configuration with Integrated Engine Nacelle. Journal of the Japan Society for Aeronautical and Space Sciences, 2003, 51, 31-35.	0.1	0
231	Aerodynamic Optimization of Supersonic Transport at Near-Sonic Regime. Journal of the Japan Society for Aeronautical and Space Sciences, 2003, 51, 577-581.	0.1	0
232	Multiobjective GA for SST Wing-Body Shape Design. , 2003, , 515-522.		0
233	Design Representation and the Shape of the Pareto Front in Evolutionary Multiobjective Structural Design. , 2007, , .		0
234	Supersonic Wind Tunnel Experiment on Aerodynamic Characteristics and Winglets Effects of the Tapered Supersonic Biplane. , 2011, , .		0

#	Article	IF	Citations
235	Aerodynamic optimization using building cube method and data mining with proper orthogonal decomposition. , 2012, , .		0
236	GUI-based Geometry Deformation Tool for Modification of Aircraft Configurations. , 2013, , .		0
237	Improvement of a sensitivity-adjustable three component force balance and its application to supersonic wind tunnel testing. Journal of Fluid Science and Technology, 2014, 9, JFST0068-JFST0068.	0.6	0
238	Computational study of compound angle film cooling flow field and aerodynamic losses using a parallel hybrid mesh Navierâ€“Stokes code. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2015, 229, 597-612.	1.4	0
239	Effects of the number of design variables on performances in Kriging-model-based many-objective optimization. , 2015, , .		0
240	Sensitivity Analysis of Wake Vortex Parameters Measured by Doppler Lidar. , 2015, , .		0
241	Turbulent jet interaction with a long rise-time pressure signature. Applied Acoustics, 2016, 114, 179-190.	3.3	0
242	Uncertainly Quantification of Lidar-Derived Wake Vortex Parameters with/without Data Assimilation (Invited). , 2016, , .		0
243	A Study on the Exhaust Heat Characteristics from a Wing Surface Depending on the Airfoil Shape at Low Reynolds Number. , 2016, , .		0
244	Change-point Detection between Two Unsteady CFD Simulation Results by Sparse Structure Learning. , 2018, , .		0
245	Effect of Camber on Badminton Shuttlecock. Proceedings (mdpi), 2018, 2, .	0.2	0
246	Inverse Design of a Thick Supercritical Airfoil.. Transactions of the Japan Society for Aeronautical and Space Sciences, 2000, 43, 61-66.	0.7	0
247	Design Exploration of Aerodynamic Wing Shape for RLV Flyback Booster. Journal of the Japan Society for Aeronautical and Space Sciences, 2006, 54, 144-150.	0.1	0
248	Numerical Analysis of Clear Air Turbulence by Using Large Eddy Simulation Coupled with a Meteorological Model. , 2013, , .		0
249	A Streamwise Upwind Algorithm Applied to Vortical flow over a Delta Wing. , 1990, , 169-178.		0
250	Supersonic inverse design method for wing-fuselage design. , 1998, , 381-389.		0
251	Inverse Optimization Method for Aerodynamic Shape Design. Notes on Numerical Fluid Mechanics, 1999, , 25-53.	0.1	0
252	Streamwise upwind algorithm development for the Navier-Stokes equations. , 1990, , 377-378.		0