## Shigeru Obayashi

List of Publications by Year in descending order

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252 papers 5,643 citations

38 h-index 63 g-index

253 all docs

253 docs citations

times ranked

253

2891 citing authors

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Aerodynamic Characteristics of Turbojav Measured with 1-m Magnetic Suspension and Balance System. , 2021, , .  |     | 1         |
| 2  | 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         |
| 3  | 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         |
| 4  | Data Assimilation for Clear Air Turbulence by Upstream LIDAR Observation. , 2020, , .  |     | 1         |
| 5  | Measurement of the Aerodynamic Forces Acting on a Non-Spinning Javelin Using an MSBS. Proceedings (mdpi), 2020, 49, 144.   | 0.2 | 1         |
| 6  | Streamline pair selection for comparative flow field visualization. Visual Computing for Industry, Biomedicine, and Art, 2020, 3, 20.  | 3.7 | 2         |
| 7  | Real-time estimation of airflow vector based on lidar observations for preview control. Atmospheric Measurement Techniques, 2020, 13, 6543-6558.   | 3.1 | 6         |
| 8  | Influence of Turbulence Statistics on Stochastic Jet-Noise Prediction with Synthetic Eddy Method. Journal of Aircraft, 2019, 56, 2342-2356.  | 2.4 | 2         |
| 9  | Multipoint Design Optimization of Vortex Generators on Transonic Swept Wings. Journal of Aircraft, 2019, 56, 1291-1302.  | 2.4 | 7         |
| 10 | Optimization of passive grooved micromixers based on genetic algorithm and graph theory. Microfluidics and Nanofluidics, 2019, 23, 1.  | 2.2 | 24        |
| 11 | Nowcasting algorithm for wind fields using ensemble forecasting and aircraft flight data.<br>Meteorological Applications, 2018, 25, 365-375.   | 2.1 | 4         |
| 12 | Aerodynamic Measurements of AGARD-B Model at High Angles of Attack by 1-m Magnetic Suspension and Balance System. , 2018, , .  |     | 6         |
| 13 | Change-point Detection between Two Unsteady CFD Simulation Results by Sparse Structure Learning. , 2018, , .   |     | O         |
| 14 | Aerodynamic Analysis of NASA Common Research Model by Block-Structured Cartesian Mesh., 2018,,.  |     | 1         |
| 15 | Direct Numerical Simulation of Gas–Particle Flows with Particle–Wall Collisions Using the Immersed Boundary Method. Applied Sciences (Switzerland), 2018, 8, 2387.   | 2.5 | 6         |
| 16 | Zonal Reduced-Order Modelling Toward Prediction of Transitional Flow Fields. Journal of Physics: Conference Series, 2018, 1036, 012012.  | 0.4 | 1         |
| 17 | Effect of Camber on Badminton Shuttlecock. Proceedings (mdpi), 2018, 2, .  | 0.2 | O         |
| 18 | Introduction of 1-m MSBS in Tohoku University, New Device for Aerodynamics Measurements of the Sports Equipment. Proceedings (mdpi), $2018, 2, .$  | 0.2 | 4         |

| #  | Article   | IF   | Citations |
|----|---|------|-----------|
| 19 | Large Eddy Simulation of Wake Vortices under Influences of Hangar Wake and the Ground., 2018,,.   |      | 2         |
| 20 | 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        |
| 21 | Numerical Simulation of Cascade Flows Using Block-Structured Cartesian Mesh. , 2017, , .  |      | 3         |
| 22 | Expected Improvement of Penalty-Based Boundary Intersection for Expensive Multiobjective Optimization. IEEE Transactions on Evolutionary Computation, 2017, 21, 898-913.  | 10.0 | 47        |
| 23 | Kriging surrogate model with coordinate transformation based on likelihood and gradient. Journal of Global Optimization, 2017, 68, 827-849.   | 1.8  | 21        |
| 24 | Numerical study on jet-wake vortex interaction of aircraft configuration. Aerospace Science and Technology, 2017, 70, 615-625.  | 4.8  | 23        |
| 25 | 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        |
| 26 | Topology and Sizing Optimization of Micromixers Using Graph-Theoretical Representation and Genetic Algorithm. , 2017, , .   |      | 3         |
| 27 | 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         |
| 28 | Electron density measurements behind a hypersonic shock wave in argon. Journal of Fluid Science and Technology, 2016, 11, JFST0005-JFST0005.  | 0.6  | 3         |
| 29 | Turbulent jet interaction with a long rise-time pressure signature. Applied Acoustics, 2016, 114, 179-190.  | 3.3  | 0         |
| 30 | Wavenumber Optimized Immersed Boundary Method for Aeroacoustic Analysis Based on Cartesian Mesh. AIAA Journal, 2016, 54, 2988-3001.   | 2.6  | 5         |
| 31 | Uncertainly Quantification of Lidar-Derived Wake Vortex Parameters with/without Data Assimilation (Invited)., 2016,,.   |      | 0         |
| 32 | Feasibility of skin-friction diagnostics based on surface pressure gradient field. Measurement Science and Technology, 2016, 27, 125304.  | 2.6  | 32        |
| 33 | 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        |
| 34 | Efficient Global Optimization of Vortex Generators on a Supercritical Infinite Wing. Journal of Aircraft, 2016, 53, 1670-1679.  | 2.4  | 9         |
| 35 | A Study on the Exhaust Heat Characteristics from a Wing Surface Depending on the Airfoil Shape at Low Reynolds Number. , 2016, , .  |      | 0         |
| 36 | Development of Magnetic Suspension and Balance System for Intermittent Supersonic Wind Tunnels. AIAA Journal, 2016, 54, 1277-1286.  | 2.6  | 9         |

| #  | Article  | IF  | Citations |
|----|--|-----|-----------|
| 37 | Plate-Angle Effects on Acoustic Waves from Supersonic Jets Impinging on Inclined Plates. AIAA Journal, 2016, 54, 816-827.  | 2.6 | 32        |
| 38 | Real-Time Flow Prediction of Low-Level Atmospheric Turbulence. , 2015, , .   |     | 4         |
| 39 | Multipoint Design of Vortex Generators on a Swept Infinite-Wing under Cruise and Critical Condition. , 2015, , .   |     | 3         |
| 40 | Computational study of compound angle film cooling flow field and aerodynamic losses using a parallel hybrid mesh Navier–Stokes code. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2015, 229, 597-612. | 1.4 | O         |
| 41 | Filtering Algorithm of Airborne Doppler Lidar Measurements for Improved Wind Estimation.<br>Transactions of the Japan Society for Aeronautical and Space Sciences, 2015, 58, 149-155.  | 0.7 | 3         |
| 42 | 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        |
| 43 | 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        |
| 44 | A data assimilation methodology for reconstructing turbulent flows around aircraft. Journal of Computational Physics, 2015, 283, 559-581.  | 3.8 | 81        |
| 45 | Effects of the number of design variables on performances in Kriging-model-based many-objective optimization. , $2015, \ldots$   |     | 0         |
| 46 | 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        |
| 47 | Analysis of sonic boom propagation based on the KZK equation. , 2015, , .  |     | 4         |
| 48 | 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         |
| 49 | Nonlinear Aeroelastic Analysis of Control Surface with Freeplay Using<br>Computational-Fluid-Dynamics-Based Reduced-Order Models. Journal of Aircraft, 2015, 52, 569-583.  | 2.4 | 8         |
| 50 | 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        |
| 51 | Sensitivity Analysis of Wake Vortex Parameters Measured by Doppler Lidar. , 2015, , .  |     | 0         |
| 52 | 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         |
| 53 | Sensitivity Analysis of Unsteady Flow Fields and Impact of Measurement Strategy. Mathematical Problems in Engineering, 2014, 2014, 1-12.   | 1.1 | 2         |
| 54 | Numerical Simulation of Jet-Wake Vortex Interaction. , 2014, , .   |     | 1         |

| #  | Article   | IF  | Citations |
|----|---|-----|-----------|
| 55 | Aerodynamic Optimization of High-Wing Configuration for Near Future Aircraft. , 2014, , .   |     | 1         |
| 56 | Sonic Boom Estimation using the Multipole Method for Free-Flight Experiments. , 2014, , .   |     | 5         |
| 57 | 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        |
| 58 | Kriging model based many-objective optimization with efficient calculation of expected hypervolume improvement. , $2014$ , , .  |     | 13        |
| 59 | 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        |
| 60 | 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         |
| 61 | 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         |
| 62 | Efficient Global Optimization of Vortex Generators on a Super Critical Infinite-Wing Using Kriging-Based Surrogate Models. , 2014, , .  |     | 6         |
| 63 | Measurement sensitivity and resolution for background oriented schlieren during image recording. Journal of Visualization, 2013, 16, 201-207.   | 1.8 | 47        |
| 64 | 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       |
| 65 | Simultaneous visualization of surface and flow field for a projectile. Journal of Visualization, 2013, 16, 331-340.   | 1.8 | 4         |
| 66 | Hypofrontal activity during word retrieval in older adults: A near-infrared spectroscopy study. Neuropsychologia, 2013, 51, 418-424.  | 1.6 | 17        |
| 67 | Waveletâ€based data compression for flow simulation on blockâ€structured Cartesian mesh.<br>International Journal for Numerical Methods in Fluids, 2013, 73, 462-476.                               | 1.6 | 18        |
| 68 | 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        |
| 69 | GUI-based Geometry Deformation Tool for Modification of Aircraft Configurations. , 2013, , .  |     | O         |
| 70 | Wind Tunnel Testing on Start/Unstart Characteristics of Finite Supersonic Biplane Wing. International Journal of Aerospace Engineering, 2013, 2013, 1-10.   | 0.9 | 13        |
| 71 | Kriging-surrogate-based optimization considering expected hypervolume improvement in non-constrained many-objective test problems. , 2013, , .  |     | 19        |
| 72 | 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 |
|----|--|-----|-----------|
| 73 | 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         |
| 74 | Parametric Study of Vortex Generators on a Super Critical Infinite-Wing with Shock-Induced Separation. , $2013,  ,  .$   |     | 1         |
| 75 | 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         |
| 76 | 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         |
| 77 | Airport Terrain-Induced Turbulence Simulations Integrated with Weather Prediction Data.<br>Transactions of the Japan Society for Aeronautical and Space Sciences, 2013, 56, 286-292.   | 0.7 | 10        |
| 78 | Numerical Analysis of Clear Air Turbulence by Using Large Eddy Simulation Coupled with a Meteorological Model. , $2013,  ,  .$   |     | 0         |
| 79 | Assessment of some experimental and image analysis factors for background-oriented schlieren measurements. Applied Optics, 2012, 51, 7554.   | 1.8 | 10        |
| 80 | Kriging/RBF-Hybrid Response Surface Methodology for Highly Nonlinear Functions. Journal of Computational Science and Technology, 2012, 6, 81-96.   | 0.4 | 9         |
| 81 | Aerodynamic Properties and Flow Behavior for a Badminton Shuttlecock with Spin at High Reynolds Numbers. Procedia Engineering, 2012, 34, 104-109.  | 1.2 | 16        |
| 82 | Aerodynamic optimization using building cube method and data mining with proper orthogonal decomposition. , 2012, , .  |     | 0         |
| 83 | Comparison of the criteria for updating Kriging response surface models in multi-objective optimization. , 2012, , .   |     | 16        |
| 84 | Aerodynamic properties of a shuttlecock with spin at high Reynolds number. Procedia Engineering, 2011, 13, 271-277.  | 1.2 | 22        |
| 85 | Calculation of Unsteady Control Surface Aerodynamics using Reduced-Order Models., 2011,,.  |     | 3         |
| 86 | 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        |
| 87 | Supersonic Wind Tunnel Experiment on Aerodynamic Characteristics and Winglets Effects of the Tapered Supersonic Biplane., 2011,,.  |     | 0         |
| 88 | Shock stand-off distance of a solid sphere decelerating in transonic velocity range. Shock Waves, 2011, 21, 483-489.   | 1.9 | 9         |
| 89 | Drag reduction of a pickup truck by a rear downward flap. International Journal of Automotive<br>Technology, 2011, 12, 369-374.  | 1.4 | 19        |
| 90 | Implementation of visual data mining for unsteady blood flow field in an aortic aneurysm. Journal of Visualization, 2011, 14, 393-398.   | 1.8 | 3         |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 91  | 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        |
| 92  | Kriging/RBF-hybrid response surface method for highly nonlinear functions., 2011,,.  |     | 6         |
| 93  | Two-Dimensional Optimization of a Stent for an Aneurysm. Journal of Medical Devices, Transactions of the ASME, 2010, 4, .  | 0.7 | 15        |
| 94  | 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        |
| 95  | 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        |
| 96  | Material design optimization for a sport shoe sole by evolutionary computation and FEM analysis. , 2010, , .   |     | 2         |
| 97  | 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         |
| 98  | Helicopter Rotor Shape Optimization for the Improvement of Aeroacoustic Performance in Hover. Journal of Aircraft, 2010, 47, 1770-1783.  | 2.4 | 33        |
| 99  | Aerodynamic Performance of the Three-Dimensional Lifting Supersonic Biplane. Journal of Aircraft, 2010, 47, 983-991.   | 2.4 | 2         |
| 100 | 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        |
| 101 | Design of Supersonic Biplane Aircraft Concerning Sonic Boom Minimization. , 2010, , .  |     | 1         |
| 102 | Ballistic Range Experiment on the Low Sonic Boom Characteristics of Supersonic Biplane. , 2010, , .  |     | 3         |
| 103 | Sonic Boom Variability Due to Homogeneous Atmospheric Turbulence. Journal of Aircraft, 2009, 46, 1886-1893.  | 2.4 | 16        |
| 104 | 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         |
| 105 | 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         |
| 106 | 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        |
| 107 | Efficient Aeroelastic Analysis Using Unstructured CFD Method and Reduced-Order Unsteady<br>Aerodynamic Model., 2009,,.   |     | 2         |
| 108 | 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        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 109 | 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        |
| 110 | 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         |
| 111 | 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         |
| 112 | Knowledge Discovery for Flyback-Booster Aerodynamic Wing Using Data Mining. Journal of Spacecraft and Rockets, 2008, 45, 975-987.   | 1.9 | 39        |
| 113 | Studies on Design Optimization of Coronary Stents. Journal of Medical Devices, Transactions of the ASME, 2008, 2, .   | 0.7 | 18        |
| 114 | Measurement-Integrated Simulation of Clear Air Turbulence Using a Four-dimensional Variational Method. Journal of Aircraft, 2008, 45, 1217-1229.  | 2.4 | 18        |
| 115 | Application of hybrid evolutionary algorithms to low exhaust emission diesel engine design. Engineering Optimization, 2008, 40, 1-16.   | 2.6 | 21        |
| 116 | Assimilation Experiment of Lidar Measurements for Wake Turbulence. Journal of Fluid Science and Technology, 2008, 3, 512-518.   | 0.6 | 12        |
| 117 | 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        |
| 118 | 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         |
| 119 | Data Mining for Multidisciplinary Design Space of Regional-Jet Wing. Journal of Aerospace Computing, Information, and Communication, 2007, 4, 1019-1036.  | 0.8 | 15        |
| 120 | Wave Drag Characteristics of a Low-Drag Supersonic Formation Flying Concept. Journal of Aircraft, 2007, 44, 675-679.  | 2.4 | 1         |
| 121 | Multidisciplinary Design Optimization and Data Mining for Transonic Regional-Jet Wing. Journal of Aircraft, 2007, 44, 1100-1112.  | 2.4 | 49        |
| 122 | 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        |
| 123 | Multi-Objective Design Exploration of a Centrifugal Impeller Accompanied With a Vaned Diffuser. , 2007, , 939.  |     | 19        |
| 124 | Improvement of Nonlinear Lateral Characteristics of Lifting-Body Type Reentry Vehicle Using Optimization Algorithm., 2007,,.  |     | 2         |
| 125 | Functional Organization of Monkey Brain for Abstract Operation. Cortex, 2007, 43, 389-396.  | 2.4 | 11        |
| 126 | Design Representation and the Shape of the Pareto Front in Evolutionary Multiobjective Structural Design. , 2007, , .   |     | 0         |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 127 | Experimental and Computational Fluid Dynamics Around Supersonic Biplane for Sonic-Boom Reduction., 2007,,.  |     | 17        |
| 128 | Investigation of Supersonic Wing Shape Using Busemann Biplane Airfoil., 2007,,.   |     | 9         |
| 129 | A Study of Busemann-Type Biplane for Avoiding Choked Flow. , 2007, , .  |     | 16        |
| 130 | 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        |
| 131 | Evolutionary Multiobjective Optimization of Steel Structural Systems in Tall Buildings. , 2007, , 604-618.  |     | 7         |
| 132 | Knowledge Discovery in Aerodynamic Design Space for Flyback-Booster Wing Using Data Mining. , 2006, , .   |     | 18        |
| 133 | Application of Local Correlation-Based Transition Model to Flows Around Wings. , 2006, , .  |     | 28        |
| 134 | A Kriging-based probabilistic optimization method with an adaptive search region. Engineering Optimization, 2006, 38, 541-555.  | 2.6 | 8         |
| 135 | Multidisciplinary Design Optimization of Wing Shape for a Small Jet Aircraft Using Kriging Model. , 2006, , .   |     | 38        |
| 136 | Optimization of Combustion Chamber for Diesel Engine Using Kriging Model. Journal of Fluid Science and Technology, 2006, 1, 138-146.                                      | 0.6 | 72        |
| 137 | Overset Unstructured Grids Method for Viscous Flow Computations. AIAA Journal, 2006, 44, 1617-1623.   | 2.6 | 13        |
| 138 | Extensions of Overset Unstructured Grids to Multiple Bodies in Contact. Journal of Aircraft, 2006, 43, 52-57.   | 2.4 | 15        |
| 139 | Design Exploration of Aerodynamic Wing Shape for Reusable Launch Vehicle Flyback Booster. Journal of Aircraft, 2006, 43, 832-836.   | 2.4 | 18        |
| 140 | 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         |
| 141 | Multi-Objective Optimization and Data Mining. Journal of the Society of Mechanical Engineers, 2006, 109, 383-385.   | 0.0 | 2         |
| 142 | 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         |
| 143 | Design under Uncertainties of Wings in Transonic Field. JSME International Journal Series B, 2005, 48, 218-223.   | 0.3 | 7         |
| 144 | High-Fidelity Multidisciplinary Design Optimization of Wing Shape for Regional Jet Aircraft. Lecture Notes in Computer Science, 2005, , 621-635.                          | 1.3 | 10        |

| #   | Article   | IF  | Citations |
|-----|---|-----|-----------|
| 145 | Aerodynamic Optimization Design with Kriging Model. Transactions of the Japan Society for Aeronautical and Space Sciences, 2005, 48, 161-168.   | 0.7 | 11        |
| 146 | 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        |
| 147 | Data Mining for Aerodynamic Design Space. Journal of Aerospace Computing, Information, and Communication, 2005, 2, 452-469.   | 0.8 | 75        |
| 148 | Drag Characteristics of a Low-Drag Low-Boom Supersonic Formation Flying Concept. , 2005, , .  |     | 1         |
| 149 | Multi-Objective Design Exploration for Aerodynamic Configurations. , 2005, , .  |     | 46        |
| 150 | The Application of MDO Technologies to the Design of a High Performance Small Jet Aircraft - Lessons Learned and Some Practical Concerns. , 2005, , .   |     | 6         |
| 151 | High-Fidelity Multidisciplinary Design Optimization of Aerostructural Wing Shape for Regional Jet. , 2005, , .  |     | 23        |
| 152 | Numerical Analyses of Discrete Gust Response for an Aircraft. Journal of Aircraft, 2004, 41, 1353-1359.   | 2.4 | 26        |
| 153 | Exhaust manifold design with tapered pipes using divided range MOGA. Engineering Optimization, 2004, 36, 149-163.   | 2.6 | 21        |
| 154 | Monkey brain areas underlying remote-controlled operation. European Journal of Neuroscience, 2004, 19, 1397-1407.   | 2.6 | 7         |
| 155 | Possible mechanism for transfer of motor skill learning: implication of the cerebellum. Cerebellum, 2004, 3, 204-211.   | 2.5 | 41        |
| 156 | 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       |
| 157 | Transonic Axial-Flow Blade Optimization: Evolutionary Algorithms/Three-Dimensional Navier-Stokes<br>Solver. Journal of Propulsion and Power, 2004, 20, 612-619.   | 2.2 | 104       |
| 158 | CFD Visualization of Second Primary Vortex Structure on a 65-Degree Delta Wing. , 2004, , .   |     | 10        |
| 159 | Kriging-based Probabilistic Method for Constrained Multi-Objective Optimization Problem. , 2004, , .  |     | 16        |
| 160 | Development of a New Radioligand,<br>N-(5-Fluoro-2-phenoxyphenyl)-N-(2-[18F]fluoroethyl-5-methoxybenzyl)acetamide, for PET Imaging of<br>Peripheral Benzodiazepine Receptor in Primate Brain. Journal of Medicinal Chemistry, 2004, 47,<br>2228-2235. | 6.4 | 139       |
| 161 | INTRAPARIETAL BIMODAL NEURONES DELINEATING EXTRINSIC SPACE THROUGH INTRINSIC ACTIONS. Psychologia, 2004, 47, 63-78.   | 0.3 | 6         |
| 162 | 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        |

| #   | Article   | lF  | Citations |
|-----|---|-----|-----------|
| 163 | Exhaust Manifold Design for a Car Engine Based on Engine Cycle Simulation. , 2003, , 475-482.   |     | O         |
| 164 | Fronto-parieto-cerebellar interaction associated with intermanual transfer of monkey tool-use learning. Neuroscience Letters, 2003, 339, 123-126.   | 2.1 | 24        |
| 165 | Visualization and Data Mining of Pareto Solutions Using Self-Organizing Map. Lecture Notes in Computer Science, 2003, , 796-809.  | 1.3 | 116       |
| 166 | Low-Boom Design Optimization for SST Canard-Wing-Fuselage Configuration., 2003,,.   |     | 11        |
| 167 | Numerical Analyses of Discrete Gust Response for a Flexible Aircraft. , 2003, , .   |     | 0         |
| 168 | High-Fidelity Swept and Leaned Rotor Blade Design Optimization Using Evolutionary Algorithm. , 2003, , .  |     | 7         |
| 169 | Validation of Drag Estimation on Wing-Fuselage Configuration for a Navier-Stokes Solver. , 2003, , .  |     | 0         |
| 170 | Aileron Buzz Simulation Using an Implicit Multiblock Aeroelastic Solver. Journal of Aircraft, 2003, 40, 580-589.  | 2.4 | 31        |
| 171 | Numerical Simulation: Supersonic Flow Around Wing-Body Configuration with Integrated Engine Nacelle. AIAA Journal, 2003, 41, 213-217.   | 2.6 | 5         |
| 172 | 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         |
| 173 | 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         |
| 174 | Multiobjective GA for SST Wing-Body Shape Design. , 2003, , 515-522.  |     | 0         |
| 175 | Advanced Fluid Information. Multiblock Navier-Stokes Solver for Wing/Fuselage Transport Aircraft JSME International Journal Series B, 2002, 45, 85-90.                                    | 0.3 | 10        |
| 176 | Macaque prefrontal activity associated with extensive tool use. NeuroReport, 2002, 13, 2349-2354.   | 1.2 | 31        |
| 177 | Navier-Stokes Optimization of Supersonic Wings with Four Objectives Using Evolutionary Algorithm. Journal of Aircraft, 2002, 39, 621-629.   | 2.4 | 76        |
| 178 | Automated Aerodynamic Optimization System for SST Wlng-Body Configuration. , 2002, , .  |     | 5         |
| 179 | Numerical simulation of supersonic flow around wing-body configuration with integrated engine nacelle. , 2002, , .  |     | 2         |
| 180 | Self-organizing map of Pareto solutions obtained from multiobjective supersonic wing design. , 2002, , .  |     | 11        |

| #   | Article  | IF   | Citations |
|-----|--|------|-----------|
| 181 | 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        |
| 182 | Pareto Solutions of Multipoint Design of Supersonic Wings Using Evolutionary Algorithms. , 2002, , 3-15.   |      | 10        |
| 183 | A transonic wing inverse design capability for complete aircraft configurations. , 2001, , .   |      | 3         |
| 184 | Navier-Stokes optimization of supersonic wings with four design objectives using evolutionary algorithm. , 2001, , .   |      | 11        |
| 185 | Functional Brain Mapping of Monkey Tool Use. Neurolmage, 2001, 14, 853-861.  | 4.2  | 205       |
| 186 | Self-images in the video monitor coded by monkey intraparietal neurons. Neuroscience Research, 2001, 40, 163-173.  | 1.9  | 211       |
| 187 | Aerodynamic Optimization of Supersonic Transport Wing Using Unstructured Adjoint Method. AIAA<br>Journal, 2001, 39, 1011-1020.   | 2.6  | 86        |
| 188 | Aerodynamic Shape Optimization of Supersonic Wings by Adaptive Range Multiobjective Genetic Algorithms. Lecture Notes in Computer Science, 2001, , 639-652.                            | 1.3  | 24        |
| 189 | Real-coded adaptive range genetic algorithm applied to transonic wing optimization. Applied Soft Computing Journal, 2001, 1, 179-187.  | 7.2  | 68        |
| 190 | Flap-Deflection Optimization for Transonic Cruise Performance Improvement of Supersonic Transport Wing. Journal of Aircraft, 2001, 38, 709-717.  | 2.4  | 14        |
| 191 | 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        |
| 192 | Subjective image of invisible hand coded by monkey intraparietal neurons. NeuroReport, 2000, 11, 3499-3505.  | 1.2  | 95        |
| 193 | Transonic Wing Shape Optimization Based on Evolutionary Algorithms. Lecture Notes in Computer Science, 2000, , 172-181.  | 1.3  | 3         |
| 194 | Multiobjective evolutionary computation for supersonic wing-shape optimization. IEEE Transactions on Evolutionary Computation, 2000, 4, 182-187.                                       | 10.0 | 82        |
| 195 | Multiobjective genetic algorithm applied to aerodynamic design of cascade airfoils. IEEE Transactions on Industrial Electronics, 2000, 47, 211-216.                                    | 7.9  | 34        |
| 196 | Real-Coded Adaptive Range Genetic Algorithm Applied to Transonic Wing Optimization. Lecture Notes in Computer Science, 2000, , 712-721.  | 1.3  | 17        |
| 197 | Inverse Design of a Thick Supercritical Airfoil Transactions of the Japan Society for Aeronautical and Space Sciences, 2000, 43, 61-66.  | 0.7  | 0         |
| 198 | Inverse Design of Supersonic Airfoils Using Integral Equations. Journal of Aircraft, 1999, 36, 606-608.  | 2.4  | 1         |

| #   | Article   | IF  | Citations |
|-----|---|-----|-----------|
| 199 | Euler/Navier-Stokes Optimization of Supersonic Wing Design Based on Evolutionary Algorithm. AIAA Journal, 1999, 37, 1327-1328.                        | 2.6 | 14        |
| 200 | Inverse Design Optimization of Transonic Wings Based on Multi-Objective Genetic Algorithms. AIAA Journal, 1999, 37, 1656-1662.                        | 2.6 | 13        |
| 201 | Fractional factorial design of genetic coding for aerodynamic optimization. , 1999, , .   |     | 14        |
| 202 | Inverse optimization of supersonic wing design with twist specification. Inverse Problems in Science and Engineering, 1999, 7, 519-535.               | 0.5 | 2         |
| 203 | Euler/Navier-Stokes Optimization of Supersonic Wing Design Based on Evolutionary Algorithm. , 1999, , 249-256.  |     | 3         |
| 204 | Inverse Optimization Method for Aerodynamic Shape Design. Notes on Numerical Fluid Mechanics, 1999, , 25-53.  | 0.1 | 0         |
| 205 | Inverse optimization of transonic wing design using multiobjective genetic algorithms. Inverse Problems in Science and Engineering, 1998, 6, 317-330. | 0.5 | 2         |
| 206 | Inverse optimization of transonic wing shape for mid-size regional aircraft. , 1998, , .  |     | 7         |
| 207 | Inverse design method for wings of supersonic transport. , 1998, , .  |     | 10        |
| 208 | Niching and elitist models for MOGAs. Lecture Notes in Computer Science, 1998, , 260-269.   | 1.3 | 43        |
| 209 | A supersonic inverse wing design method and its application to Japanese SST. , 1998, , 79-84.   |     | 1         |
| 210 | Supersonic inverse design method for wing-fuselage design. , 1998, , 381-389.   |     | 0         |
| 211 | New Blunt Trailing-Edge Airfoil Design by Inverse Optimization Method. Journal of Aircraft, 1997, 34, 255-257.  | 2.4 | 6         |
| 212 | Cascade airfoil design by multiobjective genetic algorithms. , 1997, , .  |     | 10        |
| 213 | Multiobjective Genetic Algorithm for Multidisciplinary Design of Transonic Wing Planform. Journal of Aircraft, 1997, 34, 690-693.                     | 2.4 | 68        |
| 214 | Comparison of Optimization Algorithms for Aerodynamic Shape Design. AIAA Journal, 1997, 35, 1413-1415.  | 2.6 | 55        |
| 215 | Inverse optimization method for blunt-trailing-edge airfoils. , 1997, , 117-122.  |     | 3         |
| 216 | Genetic optimization of target pressure distributions for inverse design methods. AIAA Journal, 1996, 34, 881-886.                                    | 2.6 | 99        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 217 | Aerodynamic optimization with evolutionary algorithms. , 1996, , .  |     | 7         |
| 218 | Tradeoff Analysis of Aerodynamic Wing Design for RLV. , 1996, , 129-136.  |     | 0         |
| 219 | Genetic algorithm for aerodynamic inverse optimization problems. , 1995, , .  |     | 11        |
| 220 | Navier-Stokes computations on full wing-body configuration with oscillating control surfaces. Journal of Aircraft, 1995, 32, 1227-1233. | 2.4 | 5         |
| 221 | Genetic optimization of target pressure distributions for inverse design methods. , 1995, , .   |     | 17        |
| 222 | Convergence acceleration of a Navier-Stokes solver for efficient static aeroelastic computations. AIAA Journal, 1995, 33, 1134-1141.    | 2.6 | 312       |
| 223 | Navier-Stokes computations for oscillating control surfaces. Journal of Aircraft, 1994, 31, 631-636.                                    | 2.4 | 18        |
| 224 | Practical formulation of a positively conservative scheme. AIAA Journal, 1994, 32, 1093-1095.   | 2.6 | 43        |
| 225 | Unsteady Navier-Stokes simulation of the canard-wing-body ramp motion. , 1993, , .  |     | 0         |
| 226 | Virtual zone Navier-Stokes computations for oscillating control surfaces., 1993,,.  |     | 2         |
| 227 | Navier-Stokes computations on full-span wing-body configuration withoscillating control surfaces. , 1993, , .                           |     | 2         |
| 228 | Higher-order accuracy for upwind methods by using the compatibility equations. AIAA Journal, 1993, 31, 251-256.                         | 2.6 | 0         |
| 229 | Unsteady shock-vortex interaction on a flexible delta wing. Journal of Aircraft, 1992, 29, 790-798.                                     | 2.4 | 17        |
| 230 | Navier-Stokes computations for oscillating control surfaces. , 1992, , .  |     | 10        |
| 231 | Flowfield of a lifting rotor in hover - A Navier-Stokes simulation. AIAA Journal, 1992, 30, 2371-2378.                                  | 2.6 | 171       |
| 232 | Freestream capturing for moving coordinates in three dimensions. AIAA Journal, 1992, 30, 1125-1128.                                     | 2.6 | 51        |
| 233 | Numerical solutions of forward-flight rotor flow using an upwind method. Journal of Aircraft, 1991, 28, 374-380.                        | 2.4 | 40        |
| 234 | Unsteady shock-vortex interaction on a flexible delta wing. , 1991, , .   |     | 5         |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 235 | Streamwise upwind algorithm for computing unsteady transonic flows past oscillating wings. AIAA Journal, 1991, 29, 1668-1677.   | 2.6 | 35        |
| 236 | Application of a streamwise upwind algorithm for unsteady transonic computations over oscillating wings. , $1990,  \ldots$  |     | 10        |
| 237 | A Streamwise Upwind Algorithm Applied to Vortical flow over a Delta Wing. , 1990, , 169-178.  |     | 0         |
| 238 | Streamwise upwind algorithm development for the Navier-Stokes equations., 1990,, 377-378.   |     | 0         |
| 239 | High-resolution upwind scheme for vortical-flow simulations. Journal of Aircraft, 1989, 26, 1123-1129.  | 2.4 | 87        |
| 240 | Use of high-resolution upwind scheme for vortical flow simulations. , 1989, , .   |     | 1         |
| 241 | Improvements and applications of a streamwise upwind algorithm. , 1989, , .   |     | 6         |
| 242 | Numerical simulation of the integrated space shuttle vehicle in ascent. , 1988, , .   |     | 146       |
| 243 | Numerical simulation of underexpanded plumes using upwind algorithms. , 1988, , .   |     | 23        |
| 244 | Navier-Stokes simulations of transonic flows over a practical wing configuration. AIAA Journal, 1987, 25, 369-370.  | 2.6 | 38        |
| 245 | Navier-Stokes simulations of transonic flows over a wing-fuselage combination. AIAA Journal, 1987, 25, 1587-1596.   | 2.6 | 27        |
| 246 | Toward the Navier-Stokes analysis of transport aircraft configurations. , 1987, , .   |     | 6         |
| 247 | Improvements in efficiency and reliability for Navier-Stokes computations using the LU-ADI factorization algorithm. , $1986,  ,  .$   |     | 61        |
| 248 | Practical applications of new LU-ADI scheme for the three-dimensional Navier-Stokes computation of transonic viscous flows. , $1986$ , , .  |     | 54        |
| 249 | An approximate LU factorization method for the compressible Navier-Stokes equations. Journal of Computational Physics, 1986, 63, 157-167.   | 3.8 | 42        |
| 250 | Two-Point Implicit Scheme for Euler Equations. Journal of the Physical Society of Japan, 1983, 52, 1525-1530.   | 1.6 | 1         |
| 251 | Multi-objective optimization for aerodynamic designs by using ARMOGAs., 0,,.  |     | 3         |
| 252 | 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        |