Rajat Mittal

List of Publications by Year
in descending order

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196	12,274	38742 50	26613 107
papers	citations	h-index	g-index

198	198	198	7119
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Prosthetic Valve Monitoring via In Situ Pressure Sensors: In Silico Concept Evaluation using Supervised Learning. Cardiovascular Engineering and Technology, 2022, 13, 90-103.	1.6	6
2	Computational Modeling of Aortic Stenosis With a Reduced Degree-of-Freedom Fluid-Structure Interaction Valve Model. Journal of Biomechanical Engineering, 2022, 144, .	1.3	1
3	Investigation of aerodynamic instability vibration of rectangular cylinder based on energy transfer. Journal of Wind Engineering and Industrial Aerodynamics, 2022, 220, 104825.	3.9	2
4	A Noninvasive Assessment of Flow Based on Contrast Dispersion in Computed Tomography Angiography: A Computational and Experimental Phantom Study. Journal of Biomechanical Engineering, 2022, 144, .	1.3	1
5	10.1063/5.0086320.2. , 2022, , .		0
6	Perimeter leakage of face masks and its effect on the mask's efficacy. Physics of Fluids, 2022, 34, .	4.0	16
7	10.1063/5.0086320.1. , 2022, , .		0
8	A method for partitioning the sources of aerodynamic loading noise in vortex dominated flows. Physics of Fluids, 2022, 34, .	4.0	3
9	Mitral Valve Regurgitation Murmursâ€"Insights from Hemoacoustic Computational Modeling. Fluids, 2022, 7, 164.	1.7	0
10	Computational modeling of drug dissolution in the human stomach: Effects of posture and gastroparesis on drug bioavailability. Physics of Fluids, 2022, 34, .	4.0	9
11	On the initiation and sustenance of flow-induced vibration of cylinders: insights from force partitioning. Journal of Fluid Mechanics, 2021, 907, .	3.4	33
12	Systolic anterior motion in hypertrophic cardiomyopathy: a fluidâ€"structure interaction computational model. Theoretical and Computational Fluid Dynamics, 2021, 35, 381-396.	2.2	7
13	Significance of the strain-dominated region around a vortex on induced aerodynamic loads. Journal of Fluid Mechanics, 2021, 918, .	3.4	17
14	A computational study of the hemodynamics of bioprosthetic aortic valves with reduced leaflet motion. Journal of Biomechanics, 2021, 120, 110350.	2.1	10
15	Mosquitoes buzz and fruit flies donâ€™t-a comparative aeroacoustic analysis of wing-tone generation. Bioinspiration and Biomimetics, 2021, 16, 046019.	2.9	6
16	One size fits all?: A simulation framework for face-mask fit on population-based faces. PLoS ONE, 2021, 16, e0252143.	2.5	18
17	Quantitative analysis of the kinematics and induced aerodynamic loading of individual vortices in vortex-dominated flows: A computation and data-driven approach. Journal of Computational Physics, 2021, 443, 110515.	3.8	23
18	Acoustotactic response of mosquitoes in untethered flight to incidental sound. Scientific Reports, 2021, 11, 1884.	3.3	13

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19	Detecting Aortic Valve Anomaly From Induced Murmurs: Insights From Computational Hemodynamic Models. Frontiers in Physiology, 2021, 12, 734224.	2.8	2
20	Computational Modeling of Drug Dissolution in the Human Stomach. Frontiers in Physiology, 2021, 12, 755997.	2.8	5
21	Mechanism and scaling of wing tone generation in mosquitoes. Bioinspiration and Biomimetics, 2020, 15, 016008.	2.9	20
22	Experimental Characterization of the Flow-Induced Flutter of a Suspended Elastic Membrane. AIAA Journal, 2020, 58, 445-454.	2.6	5
23	Aerodynamic Characteristics of Canonical Airfoils at Low Reynolds Numbers. AIAA Journal, 2020, 58, 977-980.	2.6	12
24	Spatio-temporal dynamics of turbulent separation bubbles. Journal of Fluid Mechanics, 2020, 883, .	3.4	32
25	A mathematical framework for estimating risk of airborne transmission of COVID-19 with application to face mask use and social distancing. Physics of Fluids, 2020, 32, 101903.	4.0	114
26	Adaptive separation control of a laminar boundary layer using online dynamic mode decomposition. Journal of Fluid Mechanics, 2020, 903, .	3.4	31
27	Flow physics of normal and abnormal bioprosthetic aortic valves. International Journal of Heat and Fluid Flow, 2020, 86, 108740.	2.4	6
28	Heat transfer enhancement in laminar flow heat exchangers due to flapping flags. Physics of Fluids, 2020, 32, .	4.0	18
29	Aeroelastic response of an airfoil to gusts: Prediction and control strategies from computed energy maps. Journal of Fluids and Structures, 2020, 97, 103078.	3.4	15
30	Dynamic mode decomposition based analysis of flow over a sinusoidally pitching airfoil. Journal of Fluids and Structures, 2020, 94, 102886.	3.4	23
31	The flow physics of COVID-19. Journal of Fluid Mechanics, 2020, 894, .	3.4	445
32	Computational modeling of swimming in marine invertebrates with implications for soft swimming robots. Bioinspiration and Biomimetics, 2020, 15, 046010.	2.9	4
33	Flow physics and mixing quality in a confined impinging jet mixer. AIP Advances, 2020, 10, 045105.	1.3	9
34	Total mechanical energy transport lines and attractors in separating turbulent boundary layers. Physical Review Fluids, 2020, 5, .	2.5	3
35	Flutter-enhanced mixing in small-scale mixers. Physics of Fluids, 2019, 31, .	4.0	14
36	Input-Output Analysis of a Separated Flow Past a Flat Plate. , 2019, , .		0

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37	Flow physics and dynamics of flow-induced pitch oscillations of an airfoil. Journal of Fluid Mechanics, 2019, 877, 582-613.	3.4	49
38	Kinetic Control in Assembly of Plasmid DNA/Polycation Complex Nanoparticles. ACS Nano, 2019, 13, 10161-10178.	14.6	35
39	A graph-partitioned sharp-interface immersed boundary solver for efficient solution of internal flows. Journal of Computational Physics, 2019, 386, 37-46.	3.8	7
40	Flow Dynamics in the Aortic Arch and Its Effect on the Arterial Input Function in Cardiac Computed Tomography. Journal of Biomechanical Engineering, 2019, 141, .	1.3	7
41	Computational Modeling and Analysis of Murmurs Generated by Modeled Aortic Stenoses. Journal of Biomechanical Engineering, 2019, 141, .	1.3	7
42	An Integrated Study of the Aeromechanics of Hovering Flight in Perturbed Flows. AIAA Journal, 2019, 57, 3753-3764.	2.6	11
43	Enhanced mixing at inertial microscales using flow-induced flutter. Physical Review Fluids, 2019, 4, .	2.5	8
44	Matters of the heart. Journal of Fluid Mechanics, 2018, 844, 1-4.	3.4	6
45	Swimming without a spine: computational modeling and analysis of the swimming hydrodynamics of the Spanish Dancer. Bioinspiration and Biomimetics, 2018, 13, 015001.	2.9	14
46	Flow-Induced Flutter of Hanging Banners: Experiments and Validated Computational Models. , 2018, , .		0
47	Response of a Laminar Separation Bubble to Zero-Net Mass Flux Actuation. , 2018, , .		2
48	Computational Modelling and Analysis of Aeroelastic Flutter. , 2018, , .		3
49	A Highly Automated Computational Method for Modeling of Intracranial Aneurysm Hemodynamics. Frontiers in Physiology, 2018, 9, 681.	2.8	13
50	Computational modelling and analysis of haemodynamics in a simple model of aorticÂstenosis. Journal of Fluid Mechanics, 2018, 851, 23-49.	3.4	30
51	A computational approach for predicting plant canopy induced wind effects on the trajectory of golf shots. Sports Engineering, 2018, 21, 1-10.	1.1	7
52	Swimming performance and unique wake topology of the sea hare (Aplysia). Physical Review Fluids, 2018, 3, .	2.5	14
53	A method for the computational modeling of the physics of heart murmurs. Journal of Computational Physics, 2017, 336, 546-568.	3.8	20
54	Identifying Dynamic Modes of Separated Flow Subject to ZNMF-Based Control from Surface Pressure Measurements. , 2017, , .		5

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55	Computational Modeling and Analysis of Sweeping Jet Fluidic Oscillators. , 2017, , .		7
56	Effect of Synthetic Jet Modulation Schemes on the Response of a Separation Bubble. , 2017, , .		0
57	Harvesting ambient wind energy with an inverted piezoelectric flag. Applied Energy, 2017, 194, 212-222.	10.1	317
58	A Computational Method for Analyzing the Biomechanics of Arterial Bruits. Journal of Biomechanical Engineering, 2017, 139, .	1.3	8
59	Aerodynamic Properties of Rough Surfaces with High Aspect-Ratio Roughness Elements: Effect of Aspect Ratio and Arrangements. Boundary-Layer Meteorology, 2017, 163, 203-224.	2.3	35
60	Efficient relaxed-Jacobi smoothers for multigrid on parallel computers. Journal of Computational Physics, 2017, 332, 135-142.	3.8	12
61	Aeromechanics of Hovering Flight in Perturbed Flows: Insights from Computational Models and Animal Experiments. , 2017, , .		0
62	A Highly Scalable Sharp-Interface Immersed Boundary Method for Large-Scale Parallel Computers. , 2017, , .		5
63	The E-wave propagation index (EPI): A novel echocardiographic parameter for prediction of left ventricular thrombus. Derivation from computational fluid dynamic modeling and validation on human subjects. International Journal of Cardiology, 2017, 227, 662-667.	1.7	20
64	A coupled chemo-fluidic computational model for thrombogenesis in infarcted left ventricles. American Journal of Physiology - Heart and Circulatory Physiology, 2016, 310, H1567-H1582.	3.2	26
65	Flutter instability of a thin flexible plate in a channel. Journal of Fluid Mechanics, 2016, 786, 29-46.	3.4	52
66	Exponential roughness layer and analytical model for turbulent boundary layer flow over rectangular-prism roughness elements. Journal of Fluid Mechanics, 2016, 789, 127-165.	3.4	120
67	Energy harvesting by flow-induced flutter in a simple model of an inverted piezoelectric flag. Journal of Fluid Mechanics, 2016, 790, 582-606.	3.4	96
68	Effect of intravenous infusion of iodinated contrast media on the coronary blood flow in dogs. IJC Heart and Vasculature, 2016, 12, 11-14.	1.1	3
69	Wall-Modeled Large Eddy Simulation of Laminar and Turbulent Separation Bubble Flows. , 2016, , .		2
70	Recent developments in multiphysics computational models of physiological flows. Theoretical and Computational Fluid Dynamics, 2016, 30, 1-2.	2.2	2
71	Computational modeling of cardiac hemodynamics: Current status and future outlook. Journal of Computational Physics, 2016, 305, 1065-1082.	3.8	140
72	Effect of trabeculae and papillary muscles on the hemodynamics of the left ventricle. Theoretical and Computational Fluid Dynamics, 2016, 30, 3-21.	2.2	64

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73	Hemodynamics in the Left Atrium and Its Effect on Ventricular Flow Patterns. Journal of Biomechanical Engineering, 2015, 137, 111003.	1.3	70
74	A New MRI-Based Model of Heart Function with Coupled Hemodynamics and Application to Normal and Diseased Canine Left Ventricles. Frontiers in Bioengineering and Biotechnology, 2015, 3, 140.	4.1	28
75	Centripetal Acceleration Reaction: An Effective and Robust Mechanism for Flapping Flight in Insects. PLoS ONE, 2015, 10, e0132093.	2.5	17
76	Mechanical design, instrumentation and measurements from a hemoacoustic cardiac phantom. , 2015, , .		4
77	Mapping the cardiac acousteome: An overview of technologies, tools and methods. , 2015, , .		3
78	Computational Study of Computed Tomography Contrast Gradients in Models of Stenosed Coronary Arteries. Journal of Biomechanical Engineering, 2015, 137, .	1.3	9
79	Estimating coronary blood flow using CT transluminal attenuation flow encoding: Formulation, preclinical validation, and clinical feasibility. Journal of Cardiovascular Computed Tomography, 2015, 9, 559-566.e1.	1.3	20
80	Stability analysis of separated flows subject to control by zero-net-mass-flux jet. Physics of Fluids, 2015, 27, .	4.0	36
81	Simulation of Boundary Layer flows over Biofouled Surfaces. , 2015, , .		2
82	Applications of the integral Wall Model in LES of flow over surfaces including resolved and subgrid roughness. , 2015, , .		0
83	Coupled Fluid-Chemical Computational Modeling of Anticoagulation Therapies in a Stented Artery. , 2015, , .		0
84	Effect of the mitral valve on diastolic flow patterns. Physics of Fluids, 2014, 26, .	4.0	86
85	Computational study of flow-induced vibration of a reed in a channel and effect on convective heat transfer. Physics of Fluids, 2014, 26, .	4.0	81
86	Hawkmoth flight performance in tornado-like whirlwind vortices. Bioinspiration and Biomimetics, 2014, 9, 025003.	2.9	27
87	Computational modeling and validation of intraventricular flow in a simple model of the left ventricle. Theoretical and Computational Fluid Dynamics, 2014, 28, 589-604.	2.2	31
88	Subject-specific computational modeling of human phonation. Journal of the Acoustical Society of America, 2014, 135, 1445-1456.	1.1	50
89	Acceleration of the Jacobi iterative method by factors exceeding 100 using scheduled relaxation. Journal of Computational Physics, 2014, 274, 695-708.	3.8	54
90	Computational Study of the Dynamics of a Bileaflet Mechanical Heart Valve in the Mitral Position. Annals of Biomedical Engineering, 2014, 42, 1668-1680.	2.5	29

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91	Computational Study of Hemodynamic Effects of Abnormal E/A Ratio on Left Ventricular Filling. Journal of Biomechanical Engineering, 2014, 136, 061005.	1.3	1
92	Computational Study of Effects of Tension Imbalance on Phonation in a Three-Dimensional Tubular Larynx Model. Journal of Voice, 2014, 28, 411-419.	1.5	10
93	Effect of diastolic flow patterns on the function of the left ventricle. Physics of Fluids, 2013, 25, .	4.0	81
94	A multi-fidelity modelling approach for evaluation and optimization of wing stroke aerodynamics in flapping flight. Journal of Fluid Mechanics, 2013, 721, 118-154.	3.4	93
95	Fluid Dynamics of Human Phonation and Speech. Annual Review of Fluid Mechanics, 2013, 45, 437-467.	25.0	119
96	Hawkmoth flight stability in turbulent vortex streets. Journal of Experimental Biology, 2013, 216, 4567-79.	1.7	62
97	GPU-accelerated scalable solver for banded linear systems. , 2013, , .		0
98	Multiphysics computational models for cardiac flow and virtualâ€‰cardiography. International Journal for Numerical Methods in Biomedical Engineering, 2013, 29, 850-869.	2.1	31
99	Computational Modeling and Analysis of Hemodynamic Effects of Diastolic Heart Dysfunction During the Whole Cardiac Cycle. , 2013, , .		0
100	Time-Varying Wing-Twist Improves Aerodynamic Efficiency of Forward Flight in Butterflies. PLoS ONE, 2013, 8, e53060.	2.5	111
101	Computational modeling of phonatory dynamics in a tubular three-dimensional model of the human larynx. Journal of the Acoustical Society of America, 2012, 132, 1602-1613.	1.1	33
102	A coupled flow-acoustic computational study of bruits from a modeled stenosed artery. Medical and Biological Engineering and Computing, 2012, 50, 1025-1035.	2.8	31
103	Benchmarking a Coupled Immersed-Boundary-Finite-Element Solver for Large-Scale Flow-Induced Deformation. AIAA Journal, 2012, 50, 1638-1642.	2.6	117
104	Comparative Analysis of Thrust Production for Distinct Arm-Pull Styles in Competitive Swimming. Journal of Biomechanical Engineering, 2012, 134, .	1.3	13
105	Estimation of right atrial and ventricular hemodynamics by CT coronary angiography. Journal of Cardiovascular Computed Tomography, 2011, 5, 44-49.	1.3	8
106	Computation of Aerodynamic Sound around Complex Stationary and Moving Bodies. , 2011, , .		2
107	Koopman spectral analysis of separated flow over a finite-thickness flat plate with elliptical leading edge. , 2011, , .		15
108	Toward A Simulation-Based Tool for the Treatment of Vocal Fold Paralysis. Frontiers in Physiology, 2011, 2, 19.	2.8	40

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109	Free Fall Analysis and Simulation Tool (FAST). , 2011, , .		0
110	Thrust Production in Highly Flexible Pectoral Fins: A Computational Dissection. Marine Technology Society Journal, 2011, 45, 56-64.	0.4	5
111	A sharp-interface immersed boundary method with improved mass conservation and reduced spurious pressure oscillations. Journal of Computational Physics, 2011, 230, 7347-7363.	3.8	309
112	A high-order immersed boundary method for acoustic wave scattering and low-Mach number flow-induced sound in complex geometries. Journal of Computational Physics, 2011, 230, 1000-1019.	3.8	172
113	Direct-numerical simulation of the glottal jet and vocal-fold dynamics in a three-dimensional laryngeal model. Journal of the Acoustical Society of America, 2011, 130, 404-415.	1.1	65
114	Sensitivity of vocal fold vibratory modes to their three-layer structure: Implications for computational modeling of phonation. Journal of the Acoustical Society of America, 2011, 130, 965-976.	1.1	14
115	A computational study of asymmetric glottal jet deflection during phonation. Journal of the Acoustical Society of America, 2011, 129, 2133-2143.	1.1	39
116	Computational Study of the Effect of Slot Orientation on Synthetic Jet-Based Separation Control. International Journal of Flow Control, 2011, 3, 87-110.	0.4	8
117	Nested Cartesian grid method in incompressible viscous fluid flow. Journal of Computational Physics, 2010, 229, 7072-7101.	3.8	21
118	Computational modelling and analysis of the hydrodynamics of a highly deformable fish pectoral fin. Journal of Fluid Mechanics, 2010, 645, 345-373.	3.4	125
119	The effect of fin ray flexural rigidity on the propulsive forces generated by a biorobotic fish pectoral fin. Journal of Experimental Biology, 2010, 213, 4043-4054.	1.7	125
120	Nonlinear dynamics and synthetic-jet-based control of a canonical separated flow. Journal of Fluid Mechanics, 2010, 654, 65-97.	3.4	47
121	A computational study of the effect of vocal-fold asymmetry on phonation. Journal of the Acoustical Society of America, 2010, 128, 818-827.	1.1	36
122	A New Immersed Boundary Method for Aeroacoustic Sound Prediction around Complex Geometries. , 2010, , .		0
123	Towards Effective ZNMF Jet Based Control of a Canonical Separated Flow. , 2010, , .		6
124	Simple Representations of Zero-Net Mass-Flux Jets in Grazing Flow for Flow-Control Simulations. International Journal of Flow Control, 2010, 2, 109-125.	0.4	11
125	Analysis of flow-structure interaction in the larynx during phonation using an immersed-boundary method. Journal of the Acoustical Society of America, 2009, 126, 816-824.	1.1	49
126	Propulsive Efficiency of the Underwater Dolphin Kick in Humans. Journal of Biomechanical Engineering, 2009, 131, 054504.	1.3	31

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127	A comparison of the kinematics of the dolphin kick in humans and cetaceans. Human Movement Science, 2009, 28, 99-112.	1.4	45
128	Image guided medialization laryngoplasty. Computer Animation and Virtual Worlds, 2009, 20, 67-77.	1.2	5
129	A Computational Study of the Effect of False Vocal Folds on Glottal Flow and Vocal Fold Vibration During Phonation. Annals of Biomedical Engineering, 2009, 37, 625-642.	2.5	90
130	A computational method for analysis of underwater dolphin kick hydrodynamics in human swimming. Sports Biomechanics, 2009, 8, 60-77.	1.6	67
131	Free Fall Analysis and Simulation Tool (FAST). , 2009, , .		2
132	A Combined Experimental-Numerical Study of the Role of Wing Flexibility In Insect Flight. , 2009, , .		3
133	Large Eddy Simulation of Flows With Complex Moving Boundaries: Application to Flying and Swimming in Animals. , 2009, , .		3
134	Toward Simple Boundary Condition Representations of Zero-Net Mass-Flux Actuators in Grazing Flow. , 2009, , .		0
135	Indirect adaptive output feedback control of a biorobotic AUV using pectoral-like mechanical fins. Bioinspiration and Biomimetics, 2009, 4, 026001.	2.9	7
136	Low-dimensional models and performance scaling of a highly deformable fish pectoral fin. Journal of Fluid Mechanics, 2009, 631, 311-342.	3.4	73
137	Simple Models of Zero-Net Mass-Flux Jets for Flow Control Simulations. International Journal of Flow Control, 2009, 1, 179-197.	0.4	35
138	An immersed-boundary method for flowâ€“structure interaction in biological systems with application to phonation. Journal of Computational Physics, 2008, 227, 9303-9332.	3.8	155
139	A versatile sharp interface immersed boundary method for incompressible flows with complex boundaries. Journal of Computational Physics, 2008, 227, 4825-4852.	3.8	925
140	Analysis of Maneuvering Fish Fin Hydrodynamics Using an Immersed Boundary Method. , 2008, , .		4
141	A High Fidelity Computational Method for Flow-Tissue Interaction in Biological Flows. , 2008, , .		0
142	Reduced-Order Models of Zero-Net Mass-Flux Jets for Large-Scale Flow Control Simulations. , 2008, , .		2
143	A biorobotic flapping fin for propulsion and maneuvering. , 2008, , .		15
144	A computational study of the aerodynamic performance of a dragonfly wing section in gliding flight. Bioinspiration and Biomimetics, 2008, 3, 026004.	2.9	111

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145	Dynamics of Airfoil Separation Control using Zero-Net Mass-Flux Forcing. AIAA Journal, 2008, 46, 3103-3115.	2.6	87
146	Large-Eddy Simulations of Zero-Net-Mass-Flux Jet-Based Separation Control in a Canonical Separated Flow. , 2008, , .		3
147	Scaling of pressure drop for oscillatory flow through a slot. Physics of Fluids, 2007, 19, 078107.	4.0	16
148	Vortex Dynamics and Low-Pressure Fluctuations in the Tip-Clearance Flow. Journal of Fluids Engineering, Transactions of the ASME, 2007, 129, 1002-1014.	1.5	62
149	Active illumination based 3D surface reconstruction and registration for image-guided medialization laryngoplasty. , 2007, , .		2
150	The Development of a Biologically Inspired Propulsor for Unmanned Underwater Vehicles. IEEE Journal of Oceanic Engineering, 2007, 32, 533-550.	3.8	100
151	Numerical Simulations of Synthetic Jet Based Separation Control in a Canonical Separated Flow. , 2007, , .		3
152	Vortex Structures and Performance of Finite-Aspect-Ratio Flapping Wings in Hovering Motion. , 2007, , .		4
153	CFD-Based Analysis and Design of Biomimetic Flexible Propulsor for Autonomous Underwater Vehicles. , 2007, , .		5
154	Biologically-Inspired Adaptive Pectoral-Like Fin Control System For CFD Parameterized AUV. , 2007, , .		3
155	Large-eddy simulation analysis of mechanisms for viscous losses in a turbomachinery tip-clearance flow. Journal of Fluid Mechanics, 2007, 586, 177-204.	3.4	160
156	Numerical study of a transitional synthetic jet in quiescent external flow. Journal of Fluid Mechanics, 2007, 581, 287-321.	3.4	79
157	A methodology for high performance computation of fully inhomogeneous turbulent flows. International Journal for Numerical Methods in Fluids, 2007, 53, 947-968.	1.6	6
158	A sharp interface immersed boundary method for compressible viscous flows. Journal of Computational Physics, 2007, 225, 528-553.	3.8	256
159	Hydrodynamics of a biologically inspired tandem flapping foil configuration. Theoretical and Computational Fluid Dynamics, 2007, 21, 155-170.	2.2	186
160	Hydrodynamic Performance of Deformable Fish Fins and Flapping Foils. , 2006, , .		33
161	Adaptive Control of Separated Flow. , 2006, , .		33
162	Analysis of Flying and Swimming in Nature Using an Immersed Boundary Method. , 2006, , .		5

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163	Numerical Study of Large Aspect-Ratio Synthetic Jets. , 2006, , .		5
164	Wake topology and hydrodynamic performance of low-aspect-ratio flapping foils. Journal of Fluid Mechanics, 2006, 566, 309.	3.4	366
165	Locomotion with flexible propulsors: I. Experimental analysis of pectoral fin swimming in sunfish. Bioinspiration and Biomimetics, 2006, 1, S25-S34.	2.9	121
166	Locomotion with flexible propulsors: II. Computational modeling of pectoral fin swimming in sunfish. Bioinspiration and Biomimetics, 2006, 1, S35-S41.	2.9	89
167	A Quasi-Generalized-Coordinate Approach for Numerical Simulation of Complex Flows. Journal of Fluids Engineering, Transactions of the ASME, 2006, 128, 1394-1399.	1.5	1
168	Optimal Yaw Regulation and Trajectory Control of Biorobotic AUV Using Mechanical Fins Based on CFD Parametrization. Journal of Fluids Engineering, Transactions of the ASME, 2006, 128, 687-698.	1.5	23
169	Analysis of stability and accuracy of finite-difference schemes on a skewed mesh. Journal of Computational Physics, 2006, 213, 184-204.	3.8	36
170	Effects of tip-gap size on the tip-leakage flow in a turbomachinery cascade. Physics of Fluids, 2006, 18, 105102.	4.0	107
171	Large-Eddy Simulations of Longitudinal Vortices Embedded in a Turbulent Boundary Layer. AIAA Journal, 2006, 44, 3032-3039.	2.6	19
172	RESONANT MODE INTERACTION IN A CANONICAL SEPARATED FLOW. Fluid Mechanics and Its Applications, 2006, , 341-348.	0.2	12
173	3D Surface Reconstruction and Registration for Image Guided Medialization Laryngoplasty. Lecture Notes in Computer Science, 2006, , 761-770.	1.3	8
174	Formation Criterion for Synthetic Jets. AIAA Journal, 2005, 43, 2110-2116.	2.6	420
175	Vortex Dynamics and Mechanisms for Viscous Losses in the Tip-Clearance Flow. , 2005, , 1601.		1
176	IMMERSED BOUNDARY METHODS. Annual Review of Fluid Mechanics, 2005, 37, 239-261.	25.0	2,714
177	Numerical Study of Resonant Interactions and Flow Control in a Canonical Separated Flow. , 2005, , .		31
178	Scaling of Vorticity Flux and Entrance Length Effects in Zero-Net Mass-Flux Devices. , 2005, , .		16
179	Towards Numerical Simulation of Flapping Foils on Fixed Cartesian Grids. , 2005, , .		18
180	Wake Structure and Performance of Finite Aspect-Ratio Flapping Foils. , 2005, , .		28

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181	Computational Methodology for Large-Eddy Simulation of Tip-Clearance Flows. AIAA Journal, 2004, 42, 271-279.	2.6	92
182	Flutter, Tumble and Vortex Induced Autorotation. Theoretical and Computational Fluid Dynamics, 2004, 17, 165-170.	2.2	79
183	Study of flow in tip-clearance turbomachines using large-eddy simulation. Computing in Science and Engineering, 2004, 6, 38-46.	1.2	24
184	Low Dimensional Modeling for Zero-Net Mass-Flux Actuators. , 2004, , .		39
185	Biorobotic AUV Maneuvering by Pectoral Fins: Inverse Control Design Based on CFD Parameterization. IEEE Journal of Oceanic Engineering, 2004, 29, 777-785.	3.8	39
186	Computational Modeling in Biohydrodynamics: Trends, Challenges, and Recent Advances. IEEE Journal of Oceanic Engineering, 2004, 29, 595-604.	3.8	71
187	Numerical study of pulsatile flow in a constricted channel. Journal of Fluid Mechanics, 2003, 485, 337-378.	3.4	112
188	A Jet Formation Criterion for Synthetic Jet Actuators. , 2003, , .		57
189	Simulations of Complex Flows and Fluid-Structure Interaction Problems on Fixed Cartesian Grids. , 2003, , .		8
190	Planar Symmetry in the Unsteady Wake of a Sphere. AIAA Journal, 1999, 37, 388-390.	2.6	93
191	Suitability of Upwind-Biased Finite Difference Schemes for Large-Eddy Simulation of Turbulent Flows. AIAA Journal, 1997, 35, 1415-1417.	2.6	347
192	Direct Numerical Simulation of Flow Past Elliptic Cylinders. Journal of Computational Physics, 1996, 124, 351-367.	3.8	127
193	Generation of Streamwise Vortical Structures in Bluff Body Wakes. Physical Review Letters, 1995, 75, 1300-1303.	7.8	84
194	On the suppression of numerical oscillations using a non-linear filter. Journal of Computational Physics, 1992, 102, 49-62.	3.8	50
195	Control of longitudinal oscillations in a constant area combustor: Numerical simulation. Combustion and Flame, 1992, 89, 363-366.	5.2	3
196	Towards Longitudinal Monitoring of Leaflet Mobility in Prosthetic Aortic Valves via In-Situ Pressure Sensors: In-Silico Modeling and Analysis. Cardiovascular Engineering and Technology, 0, , .	1.6	0