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	IMMERSED BOUNDARY METHODS. Annual Review of Fluid Mechanics, 2005, 37, 239-261.	25.0	2,714
2	A versatile sharp interface immersed boundary method for incompressible flows with complex boundaries. Journal of Computational Physics, 2008, 227, 4825-4852.	3.8	925
3	The flow physics of COVID-19. Journal of Fluid Mechanics, 2020, 894, .	3.4	445
4	Formation Criterion for Synthetic Jets. AIAA Journal, 2005, 43, 2110-2116.	2.6	420
5	Wake topology and hydrodynamic performance of low-aspect-ratio flapping foils. Journal of Fluid Mechanics, 2006, 566, 309.	3.4	366
6	Suitability of Upwind-Biased Finite Difference Schemes for Large-Eddy Simulation of Turbulent Flows. AIAA Journal, 1997, 35, 1415-1417.	2.6	347
7	Harvesting ambient wind energy with an inverted piezoelectric flag. Applied Energy, 2017, 194, 212-222.	10.1	317
8	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
9	A sharp interface immersed boundary method for compressible viscous flows. Journal of Computational Physics, 2007, 225, 528-553.	3.8	256
10	Hydrodynamics of a biologically inspired tandem flapping foil configuration. Theoretical and Computational Fluid Dynamics, 2007, 21, 155-170.	2.2	186
11	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
12	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
13	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
14	Computational modeling of cardiac hemodynamics: Current status and future outlook. Journal of Computational Physics, 2016, 305, 1065-1082.	3.8	140
15	Direct Numerical Simulation of Flow Past Elliptic Cylinders. Journal of Computational Physics, 1996, 124, 351-367.	3.8	127
16	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
17	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
18	Locomotion with flexible propulsors: I. Experimental analysis of pectoral fin swimming in sunfish. Bioinspiration and Biomimetics, 2006, 1, S25-S34.	2.9	121

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19	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
20	Fluid Dynamics of Human Phonation and Speech. Annual Review of Fluid Mechanics, 2013, 45, 437-467.	25.0	119
21	Benchmarking a Coupled Immersed-Boundary-Finite-Element Solver for Large-Scale Flow-Induced Deformation. AIAA Journal, 2012, 50, 1638-1642.	2.6	117
22	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
23	Numerical study of pulsatile flow in a constricted channel. Journal of Fluid Mechanics, 2003, 485, 337-378.	3.4	112
24	A computational study of the aerodynamic performance of a dragonfly wing section in gliding flight. Bioinspiration and Biomimetics, 2008, 3, 026004.	2.9	111
25	Time-Varying Wing-Twist Improves Aerodynamic Efficiency of Forward Flight in Butterflies. PLoS ONE, 2013, 8, e53060.	2.5	111
26	Effects of tip-gap size on the tip-leakage flow in a turbomachinery cascade. Physics of Fluids, 2006, 18, 105102.	4.0	107
27	The Development of a Biologically Inspired Propulsor for Unmanned Underwater Vehicles. IEEE Journal of Oceanic Engineering, 2007, 32, 533-550.	3.8	100
28	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
29	Planar Symmetry in the Unsteady Wake of a Sphere. AIAA Journal, 1999, 37, 388-390.	2.6	93
30	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
31	Computational Methodology for Large-Eddy Simulation of Tip-Clearance Flows. AIAA Journal, 2004, 42, 271-279.	2.6	92
32	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
33	Locomotion with flexible propulsors: II. Computational modeling of pectoral fin swimming in sunfish. Bioinspiration and Biomimetics, 2006, 1, S35-S41.	2.9	89
34	Dynamics of Airfoil Separation Control using Zero-Net Mass-Flux Forcing. AIAA Journal, 2008, 46, 3103-3115.	2.6	87
35	Effect of the mitral valve on diastolic flow patterns. Physics of Fluids, 2014, 26, .	4.0	86
36	Generation of Streamwise Vortical Structures in Bluff Body Wakes. Physical Review Letters, 1995, 75, 1300-1303.	7.8	84

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37	Effect of diastolic flow patterns on the function of the left ventricle. Physics of Fluids, 2013, 25, .	4.0	81
38	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
39	Flutter, Tumble and Vortex Induced Autorotation. Theoretical and Computational Fluid Dynamics, 2004, 17, 165-170.	2.2	79
40	Numerical study of a transitional synthetic jet in quiescent external flow. Journal of Fluid Mechanics, 2007, 581, 287-321.	3.4	79
41	Low-dimensional models and performance scaling of a highly deformable fish pectoral fin. Journal of Fluid Mechanics, 2009, 631, 311-342.	3.4	73
42	Computational Modeling in Biohydrodynamics: Trends, Challenges, and Recent Advances. IEEE Journal of Oceanic Engineering, 2004, 29, 595-604.	3.8	71
43	Hemodynamics in the Left Atrium and Its Effect on Ventricular Flow Patterns. Journal of Biomechanical Engineering, 2015, 137, 111003.	1.3	70
44	A computational method for analysis of underwater dolphin kick hydrodynamics in human swimming. Sports Biomechanics, 2009, 8, 60-77.	1.6	67
45	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
46	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
47	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
48	Hawkmoth flight stability in turbulent vortex streets. Journal of Experimental Biology, 2013, 216, 4567-79.	1.7	62
49	A Jet Formation Criterion for Synthetic Jet Actuators. , 2003, , .		57
50	Acceleration of the Jacobi iterative method by factors exceeding 100 using scheduled relaxation. Journal of Computational Physics, 2014, 274, 695-708.	3.8	54
51	Flutter instability of a thin flexible plate in a channel. Journal of Fluid Mechanics, 2016, 786, 29-46.	3.4	52
52	On the suppression of numerical oscillations using a non-linear filter. Journal of Computational Physics, 1992, 102, 49-62.	3.8	50
53	Subject-specific computational modeling of human phonation. Journal of the Acoustical Society of America, 2014, 135, 1445-1456.	1.1	50
54	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

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55	Flow physics and dynamics of flow-induced pitch oscillations of an airfoil. Journal of Fluid Mechanics, 2019, 877, 582-613.	3.4	49
56	Nonlinear dynamics and synthetic-jet-based control of a canonical separated flow. Journal of Fluid Mechanics, 2010, 654, 65-97.	3.4	47
57	A comparison of the kinematics of the dolphin kick in humans and cetaceans. Human Movement Science, 2009, 28, 99-112.	1.4	45
58	Toward A Simulation-Based Tool for the Treatment of Vocal Fold Paralysis. Frontiers in Physiology, 2011, 2, 19.	2.8	40
59	Low Dimensional Modeling for Zero-Net Mass-Flux Actuators. , 2004, , .		39
60	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
61	A computational study of asymmetric glottal jet deflection during phonation. Journal of the Acoustical Society of America, 2011, 129, 2133-2143.	1.1	39
62	Analysis of stability and accuracy of finite-difference schemes on a skewed mesh. Journal of Computational Physics, 2006, 213, 184-204.	3.8	36
63	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
64	Stability analysis of separated flows subject to control by zero-net-mass-flux jet. Physics of Fluids, 2015, 27, .	4.0	36
65	Simple Models of Zero-Net Mass-Flux Jets for Flow Control Simulations. International Journal of Flow Control, 2009, 1, 179-197.	0.4	35
66	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
67	Kinetic Control in Assembly of Plasmid DNA/Polycation Complex Nanoparticles. ACS Nano, 2019, 13, 10161-10178.	14.6	35
68	Hydrodynamic Performance of Deformable Fish Fins and Flapping Foils. , 2006, , .		33
69	Adaptive Control of Separated Flow. , 2006, , .		33
70	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
71	On the initiation and sustenance of flow-induced vibration of cylinders: insights from force partitioning. Journal of Fluid Mechanics, 2021, 907, .	3.4	33
72	Spatio-temporal dynamics of turbulent separation bubbles. Journal of Fluid Mechanics, 2020, 883, .	3.4	32

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73	Numerical Study of Resonant Interactions and Flow Control in a Canonical Separated Flow. , 2005, , .		31
74	Propulsive Efficiency of the Underwater Dolphin Kick in Humans. Journal of Biomechanical Engineering, 2009, 131, 054504.	1.3	31
75	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
76	Multiphysics computational models for cardiac flow and virtualâ€‰cardiography. International Journal for Numerical Methods in Biomedical Engineering, 2013, 29, 850-869.	2.1	31
77	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
78	Adaptive separation control of a laminar boundary layer using online dynamic mode decomposition. Journal of Fluid Mechanics, 2020, 903, .	3.4	31
79	Computational modelling and analysis of haemodynamics in a simple model of aorticÂstenosis. Journal of Fluid Mechanics, 2018, 851, 23-49.	3.4	30
80	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
81	Wake Structure and Performance of Finite Aspect-Ratio Flapping Foils. , 2005, , .		28
82	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
83	Hawkmoth flight performance in tornado-like whirlwind vortices. Bioinspiration and Biomimetics, 2014, 9, 025003.	2.9	27
84	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
85	Study of flow in tip-clearance turbomachines using large-eddy simulation. Computing in Science and Engineering, 2004, 6, 38-46.	1.2	24
86	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
87	Dynamic mode decomposition based analysis of flow over a sinusoidally pitching airfoil. Journal of Fluids and Structures, 2020, 94, 102886.	3.4	23
88	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
89	Nested Cartesian grid method in incompressible viscous fluid flow. Journal of Computational Physics, 2010, 229, 7072-7101.	3.8	21
90	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

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91	A method for the computational modeling of the physics of heart murmurs. Journal of Computational Physics, 2017, 336, 546-568.	3.8	20
92	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
93	Mechanism and scaling of wing tone generation in mosquitoes. Bioinspiration and Biomimetics, 2020, 15, 016008.	2.9	20
94	Large-Eddy Simulations of Longitudinal Vortices Embedded in a Turbulent Boundary Layer. AIAA Journal, 2006, 44, 3032-3039.	2.6	19
95	Towards Numerical Simulation of Flapping Foils on Fixed Cartesian Grids. , 2005, , .		18
96	Heat transfer enhancement in laminar flow heat exchangers due to flapping flags. Physics of Fluids, 2020, 32, .	4.0	18
97	One size fits all?: A simulation framework for face-mask fit on population-based faces. PLoS ONE, 2021, 16, e0252143.	2.5	18
98	Centripetal Acceleration Reaction: An Effective and Robust Mechanism for Flapping Flight in Insects. PLoS ONE, 2015, 10, e0132093.	2.5	17
99	Significance of the strain-dominated region around a vortex on induced aerodynamic loads. Journal of Fluid Mechanics, 2021, 918, .	3.4	17
100	Scaling of Vorticity Flux and Entrance Length Effects in Zero-Net Mass-Flux Devices. , 2005, , .		16
101	Scaling of pressure drop for oscillatory flow through a slot. Physics of Fluids, 2007, 19, 078107.	4.0	16
102	Perimeter leakage of face masks and its effect on the mask's efficacy. Physics of Fluids, 2022, 34, .	4.0	16
103	A biorobotic flapping fin for propulsion and maneuvering. , 2008, , .		15
104	Koopman spectral analysis of separated flow over a finite-thickness flat plate with elliptical leading edge. , 2011, , .		15
105	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
106	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
107	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
108	Flutter-enhanced mixing in small-scale mixers. Physics of Fluids, 2019, 31, .	4.0	14

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109	Swimming performance and unique wake topology of the sea hare (Aplysia). Physical Review Fluids, 2018, 3, .	2.5	14
110	Comparative Analysis of Thrust Production for Distinct Arm-Pull Styles in Competitive Swimming. Journal of Biomechanical Engineering, 2012, 134, .	1.3	13
111	A Highly Automated Computational Method for Modeling of Intracranial Aneurysm Hemodynamics. Frontiers in Physiology, 2018, 9, 681.	2.8	13
112	Acoustotactic response of mosquitoes in untethered flight to incidental sound. Scientific Reports, 2021, 11, 1884.	3.3	13
113	Efficient relaxed-Jacobi smoothers for multigrid on parallel computers. Journal of Computational Physics, 2017, 332, 135-142.	3.8	12
114	Aerodynamic Characteristics of Canonical Airfoils at Low Reynolds Numbers. AIAA Journal, 2020, 58, 977-980.	2.6	12
115	RESONANT MODE INTERACTION IN A CANONICAL SEPARATED FLOW. Fluid Mechanics and Its Applications, 2006, , 341-348.	0.2	12
116	An Integrated Study of the Aeromechanics of Hovering Flight in Perturbed Flows. AIAA Journal, 2019, 57, 3753-3764.	2.6	11
117	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
118	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
119	A computational study of the hemodynamics of bioprosthetic aortic valves with reduced leaflet motion. Journal of Biomechanics, 2021, 120, 110350.	2.1	10
120	Computational Study of Computed Tomography Contrast Gradients in Models of Stenosed Coronary Arteries. Journal of Biomechanical Engineering, 2015, 137, .	1.3	9
121	Flow physics and mixing quality in a confined impinging jet mixer. AIP Advances, 2020, 10, 045105.	1.3	9
122	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
123	Estimation of right atrial and ventricular hemodynamics by CT coronary angiography. Journal of Cardiovascular Computed Tomography, 2011, 5, 44-49.	1.3	8
124	A Computational Method for Analyzing the Biomechanics of Arterial Bruits. Journal of Biomechanical Engineering, 2017, 139, .	1.3	8
125	3D Surface Reconstruction and Registration for Image Guided Medialization Laryngoplasty. Lecture Notes in Computer Science, 2006, , 761-770.	1.3	8
126	Enhanced mixing at inertial microscales using flow-induced flutter. Physical Review Fluids, 2019, 4, .	2.5	8

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127	Simulations of Complex Flows and Fluid-Structure Interaction Problems on Fixed Cartesian Grids. , 2003, , .		8
128	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
129	Indirect adaptive output feedback control of a biorobotic AUV using pectoral-like mechanical fins. Bioinspiration and Biomimetics, 2009, 4, 026001.	2.9	7
130	Computational Modeling and Analysis of Sweeping Jet Fluidic Oscillators. , 2017, , .		7
131	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
132	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
133	Computational Modeling and Analysis of Murmurs Generated by Modeled Aortic Stenoses. Journal of Biomechanical Engineering, 2019, 141, .	1.3	7
134	Systolic anterior motion in hypertrophic cardiomyopathy: a fluidâ€“structure interaction computational model. Theoretical and Computational Fluid Dynamics, 2021, 35, 381-396.	2.2	7
135	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
136	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
137	Towards Effective ZNMF Jet Based Control of a Canonical Separated Flow. , 2010, , .		6
138	Matters of the heart. Journal of Fluid Mechanics, 2018, 844, 1-4.	3.4	6
139	Flow physics of normal and abnormal bioprosthetic aortic valves. International Journal of Heat and Fluid Flow, 2020, 86, 108740.	2.4	6
140	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
141	Mosquitoes buzz and fruit flies donâ€™t-a comparative aeroacoustic analysis of wing-tone generation. Bioinspiration and Biomimetics, 2021, 16, 046019.	2.9	6
142	Analysis of Flying and Swimming in Nature Using an Immersed Boundary Method. , 2006, , .		5
143	Numerical Study of Large Aspect-Ratio Synthetic Jets. , 2006, , .		5
144	CFD-Based Analysis and Design of Biomimetic Flexible Propulsor for Autonomous Underwater Vehicles. , 2007, , .		5

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145	Image guided medialization laryngoplasty. Computer Animation and Virtual Worlds, 2009, 20, 67-77.	1.2	5
146	Thrust Production in Highly Flexible Pectoral Fins: A Computational Dissection. Marine Technology Society Journal, 2011, 45, 56-64.	0.4	5
147	Identifying Dynamic Modes of Separated Flow Subject to ZNMF-Based Control from Surface Pressure Measurements. , 2017, , .		5
148	A Highly Scalable Sharp-Interface Immersed Boundary Method for Large-Scale Parallel Computers. , 2017, , .		5
149	Experimental Characterization of the Flow-Induced Flutter of a Suspended Elastic Membrane. AIAA Journal, 2020, 58, 445-454.	2.6	5
150	Computational Modeling of Drug Dissolution in the Human Stomach. Frontiers in Physiology, 2021, 12, 755997.	2.8	5
151	Vortex Structures and Performance of Finite-Aspect-Ratio Flapping Wings in Hovering Motion. , 2007, , .		4
152	Analysis of Maneuvering Fish Fin Hydrodynamics Using an Immersed Boundary Method. , 2008, , .		4
153	Mechanical design, instrumentation and measurements from a hemoacoustic cardiac phantom. , 2015, , .		4
154	Computational modeling of swimming in marine invertebrates with implications for soft swimming robots. Bioinspiration and Biomimetics, 2020, 15, 046010.	2.9	4
155	Control of longitudinal oscillations in a constant area combustor: Numerical simulation. Combustion and Flame, 1992, 89, 363-366.	5.2	3
156	Numerical Simulations of Synthetic Jet Based Separation Control in a Canonical Separated Flow. , 2007, , .		3
157	Biologically-Inspired Adaptive Pectoral-Like Fin Control System For CFD Parameterized AUV. , 2007, , .		3
158	Large-Eddy Simulations of Zero-Net-Mass-Flux Jet-Based Separation Control in a Canonical Separated Flow. , 2008, , .		3
159	A Combined Experimental-Numerical Study of the Role of Wing Flexibility In Insect Flight. , 2009, , .		3
160	Large Eddy Simulation of Flows With Complex Moving Boundaries: Application to Flying and Swimming in Animals. , 2009, , .		3
161	Mapping the cardiac acousteome: An overview of technologies, tools and methods. , 2015, , .		3
162	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

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163	Computational Modelling and Analysis of Aeroelastic Flutter. , 2018, , .		3
164	Total mechanical energy transport lines and attractors in separating turbulent boundary layers. Physical Review Fluids, 2020, 5, .	2.5	3
165	A method for partitioning the sources of aerodynamic loading noise in vortex dominated flows. Physics of Fluids, 2022, 34, .	4.0	3
166	Active illumination based 3D surface reconstruction and registration for image-guided medialization laryngoplasty. , 2007, , .		2
167	Reduced-Order Models of Zero-Net Mass-Flux Jets for Large-Scale Flow Control Simulations. , 2008, , .		2
168	Free Fall Analysis and Simulation Tool (FAST). , 2009, , .		2
169	Computation of Aerodynamic Sound around Complex Stationary and Moving Bodies. , 2011, , .		2
170	Simulation of Boundary Layer flows over Biofouled Surfaces. , 2015, , .		2
171	Wall-Modeled Large Eddy Simulation of Laminar and Turbulent Separation Bubble Flows. , 2016, , .		2
172	Recent developments in multiphysics computational models of physiological flows. Theoretical and Computational Fluid Dynamics, 2016, 30, 1-2.	2.2	2
173	Response of a Laminar Separation Bubble to Zero-Net Mass Flux Actuation. , 2018, , .		2
174	Detecting Aortic Valve Anomaly From Induced Murmurs: Insights From Computational Hemodynamic Models. Frontiers in Physiology, 2021, 12, 734224.	2.8	2
175	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
176	Vortex Dynamics and Mechanisms for Viscous Losses in the Tip-Clearance Flow. , 2005, , 1601.		1
177	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
178	Computational Study of Hemodynamic Effects of Abnormal E/A Ratio on Left Ventricular Filling. Journal of Biomechanical Engineering, 2014, 136, 061005.	1.3	1
179	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
180	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

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181	A High Fidelity Computational Method for Flow-Tissue Interaction in Biological Flows. , 2008, , .		0
182	Toward Simple Boundary Condition Representations of Zero-Net Mass-Flux Actuators in Grazing Flow. , 2009, , .		0
183	A New Immersed Boundary Method for Aeroacoustic Sound Prediction around Complex Geometries. , 2010, , .		0
184	Free Fall Analysis and Simulation Tool (FAST). , 2011, , .		0
185	GPU-accelerated scalable solver for banded linear systems. , 2013, , .		0
186	Computational Modeling and Analysis of Hemodynamic Effects of Diastolic Heart Dysfunction During the Whole Cardiac Cycle. , 2013, , .		0
187	Applications of the integral Wall Model in LES of flow over surfaces including resolved and subgrid roughness. , 2015, , .		0
188	Effect of Synthetic Jet Modulation Schemes on the Response of a Separation Bubble. , 2017, , .		0
189	Aeromechanics of Hovering Flight in Perturbed Flows: Insights from Computational Models and Animal Experiments. , 2017, , .		0
190	Flow-Induced Flutter of Hanging Banners: Experiments and Validated Computational Models. , 2018, , .		0
191	Input-Output Analysis of a Separated Flow Past a Flat Plate. , 2019, , .		0
192	Coupled Fluid-Chemical Computational Modeling of Anticoagulation Therapies in a Stented Artery. , 2015, , .		0
193	10.1063/5.0086320.2. , 2022, , .		0
194	10.1063/5.0086320.1. , 2022, , .		0
195	Mitral Valve Regurgitation Murmursâ€”Insights from Hemoacoustic Computational Modeling. Fluids, 2022, 7, 164.	1.7	0
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