

Hao Liu

List of Publications by Year in descending order

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249
papers

4,629
citations

172457

29
h-index

155660

55
g-index

264
all docs

264
docs citations

264
times ranked

2791
citing authors

#	ARTICLE	IF	CITATIONS
1	Near- and far-field aerodynamics in insect hovering flight: an integrated computational study. <i>Journal of Experimental Biology</i> , 2008, 211, 239-257.	1.7	227
2	Flapping Wings and Aerodynamic Lift: The Role of Leading-Edge Vortices. <i>AIAA Journal</i> , 2007, 45, 2817-2819.	2.6	200
3	Integrated modeling of insect flight: From morphology, kinematics to aerodynamics. <i>Journal of Computational Physics</i> , 2009, 228, 439-459.	3.8	173
4	A fluid-structure interaction model of insect flight with flexible wings. <i>Journal of Computational Physics</i> , 2012, 231, 1822-1847.	3.8	165
5	Multi-scale modeling of the human cardiovascular system with applications to aortic valvular and arterial stenoses. <i>Medical and Biological Engineering and Computing</i> , 2009, 47, 743-755.	2.8	160
6	Aerodynamic performance of a hovering hawkmoth with flexible wings: a computational approach. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 722-731.	2.6	156
7	Downlink Energy Efficiency of Power Allocation and Wireless Backhaul Bandwidth Allocation in Heterogeneous Small Cell Networks. <i>IEEE Transactions on Communications</i> , 2018, 66, 1705-1716.	7.8	145
8	Aerodynamics, sensing and control of insect-scale flapping-wing flight. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2016, 472, 20150712.	2.1	104
9	A computational model study of the influence of the anatomy of the circle of willis on cerebral hyperperfusion following carotid artery surgery. <i>BioMedical Engineering OnLine</i> , 2011, 10, 84.	2.7	94
10	Biomechanics and biomimetics in insect-inspired flight systems. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2016, 371, 20150390.	4.0	93
11	Simulation of Hemodynamic Responses to the Valsalva Maneuver: An Integrative Computational Model of the Cardiovascular System and the Autonomic Nervous System. <i>Journal of Physiological Sciences</i> , 2006, 56, 45-65.	2.1	81
12	Body dynamics and hydrodynamics of swimming fish larvae: a computational study. <i>Journal of Experimental Biology</i> , 2012, 215, 4015-4033.	1.7	73
13	A CFD-informed quasi-steady model of flapping-wing aerodynamics. <i>Journal of Fluid Mechanics</i> , 2015, 783, 323-343.	3.4	70
14	Perturbation analysis of 6DoF flight dynamics and passive dynamic stability of hovering fruit fly <i>Drosophila melanogaster</i> . <i>Journal of Theoretical Biology</i> , 2011, 270, 98-111.	1.7	61
15	Owl-inspired leading-edge serrations play a crucial role in aerodynamic force production and sound suppression. <i>Bioinspiration and Biomimetics</i> , 2017, 12, 046008.	2.9	59
16	A Closed-Loop Lumped Parameter Computational Model for Human Cardiovascular System. <i>JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing</i> , 2005, 48, 484-493.	0.3	57
17	Hemodynamic performance of the Fontan circulation compared with a normal biventricular circulation: a computational model study. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2014, 307, H1056-H1072.	3.2	50
18	A one-dimensional thermo-fluid model of blood circulation in the human upper limb. <i>International Journal of Heat and Mass Transfer</i> , 2004, 47, 2735-2745.	4.8	49

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19	Bumblebees minimize control challenges by combining active and passive modes in unsteady winds. <i>Scientific Reports</i> , 2016, 6, 35043.	3.3	46
20	A Numerical Analysis of Dynamic Flight Stability of Hawkmoth Hovering. <i>Journal of Biomechanical Science and Engineering</i> , 2009, 4, 105-116.	0.3	44
21	Micro air vehicle-motivated computational biomechanics in bio-flights: aerodynamics, flight dynamics and maneuvering stability. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2010, 26, 863-879.	3.4	41
22	Unsteady bio-fluid dynamics in flying and swimming. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2017, 33, 663-684.	3.4	39
23	Novel flight style and light wings boost flight performance of tiny beetles. <i>Nature</i> , 2022, 602, 96-100.	27.8	39
24	Computational study on near wake interaction between undulation body and a D-section cylinder. <i>Ocean Engineering</i> , 2011, 38, 673-683.	4.3	38
25	On the energetics and stability of a minimal fish school. <i>PLoS ONE</i> , 2019, 14, e0215265.	2.5	37
26	Computational Biological Fluid Dynamics: Digitizing and Visualizing Animal Swimming and Flying. <i>Integrative and Comparative Biology</i> , 2002, 42, 1050-1059.	2.0	35
27	Aerodynamic Ground Effect in Fruitfly Sized Insect Takeoff. <i>PLoS ONE</i> , 2016, 11, e0152072.	2.5	33
28	Near wake vortex dynamics of a hovering hawkmoth. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2009, 25, 23-36.	3.4	32
29	Effect of torsional stiffness and inertia on the dynamics of low aspect ratio flapping wings. <i>Bioinspiration and Biomimetics</i> , 2014, 9, 016008.	2.9	32
30	Numerical Study of Cerebroarterial Hemodynamic Changes Following Carotid Artery Operation: A Comparison Between Multiscale Modeling and Stand-Alone Three-Dimensional Modeling. <i>Journal of Biomechanical Engineering</i> , 2015, 137, 101011.	1.3	31
31	The dynamics of passive feathering rotation in hovering flight of bumblebees. <i>Journal of Fluids and Structures</i> , 2019, 91, 102628.	3.4	31
32	Aerodynamic performance of a bristled wing of a very small insect. <i>Experiments in Fluids</i> , 2020, 61, 1.	2.4	31
33	Escape trajectories are deflected when fish larvae intercept their own C-start wake. <i>Journal of the Royal Society Interface</i> , 2014, 11, 20140848.	3.4	30
34	Influence of aging-induced flow waveform variation on hemodynamics in aneurysms present at the internal carotid artery: A computational model-based study. <i>Computers in Biology and Medicine</i> , 2018, 101, 51-60.	7.0	30
35	Flexible flapping wings with self-organized microwrinkles. <i>Bioinspiration and Biomimetics</i> , 2015, 10, 046005.	2.9	29
36	A robust biomimetic blade design for micro wind turbines. <i>Renewable Energy</i> , 2018, 125, 155-165.	8.9	29

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37	Vortical Structure and Aerodynamics of Hawkmoth Hovering. <i>Journal of Biomechanical Science and Engineering</i> , 2006, 1, 234-245.	0.3	28
38	Quantifying the dynamic wing morphing of hovering hummingbird. <i>Royal Society Open Science</i> , 2017, 4, 170307.	2.4	28
39	Effects of arterial blood flow on walls of the abdominal aorta: distributions of wall shear stress and oscillatory shear index determined by phase-contrast magnetic resonance imaging. <i>Heart and Vessels</i> , 2016, 31, 1168-1175.	1.2	27
40	Multi-fin kinematics and hydrodynamics in pufferfish steady swimming. <i>Ocean Engineering</i> , 2018, 158, 111-122.	4.3	26
41	Sensitivity of flow patterns in aneurysms on the anterior communicating artery to anatomic variations of the cerebral arterial network. <i>Journal of Biomechanics</i> , 2016, 49, 3731-3740.	2.1	25
42	Fish larvae exploit edge vortices along their dorsal and ventral fin folds to propel themselves. <i>Journal of the Royal Society Interface</i> , 2016, 13, 20160068.	3.4	25
43	Morphology Effects of Leading-edge Serrations on Aerodynamic Force Production: An Integrated Study Using PIV and Force Measurements. <i>Journal of Bionic Engineering</i> , 2018, 15, 661-672.	5.0	24
44	A multi-body dynamics based numerical modelling tool for solving aquatic biomimetic problems. <i>Bioinspiration and Biomimetics</i> , 2018, 13, 056001.	2.9	24
45	The gust-mitigating potential of flapping wings. <i>Bioinspiration and Biomimetics</i> , 2016, 11, 046010.	2.9	23
46	Flow instability detected in ruptured versus unruptured cerebral aneurysms at the internal carotid artery. <i>Journal of Biomechanics</i> , 2018, 72, 187-199.	2.1	23
47	Patient-specific assessment of cardiovascular function by combination of clinical data and computational model with applications to patients undergoing Fontan operation. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2014, 30, 1000-1018.	2.1	22
48	Effect of elasticity on wall shear stress inside cerebral aneurysm at anterior cerebral artery. <i>Technology and Health Care</i> , 2016, 24, 349-357.	1.2	22
49	Bees with attitude: the effects of directed gusts on flight trajectories. <i>Biology Open</i> , 2018, 7, .	1.2	22
50	Ground Effect in Fruit Fly Hovering: A Three-Dimensional Computational Study. <i>Journal of Biomechanical Science and Engineering</i> , 2013, 8, 344-355.	0.3	21
51	Multi-scale modeling of hemodynamics in the cardiovascular system. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2015, 31, 446-464.	3.4	21
52	Flapping wing aerodynamics of a numerical biological flyer model in hovering flight. <i>Computers and Fluids</i> , 2013, 85, 85-92.	2.5	20
53	Cardiovascular disease-induced thermal responses during passive heat stress: an integrated computational study. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2016, 32, e02768.	2.1	20
54	Forewings match the formation of leading-edge vortices and dominate aerodynamic force production in revolving insect wings. <i>Bioinspiration and Biomimetics</i> , 2018, 13, 016009.	2.9	20

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55	Development of Bio-Inspired Low-Noise Propeller for a Drone. <i>Journal of Robotics and Mechatronics</i> , 2018, 30, 337-343.	1.0	20
56	A multi-scale computational method applied to the quantitative evaluation of the left ventricular function. <i>Computers in Biology and Medicine</i> , 2007, 37, 700-715.	7.0	19
57	Personalized Hemodynamic Modeling of the Human Cardiovascular System: A Reduced-Order Computing Model. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 2754-2764.	4.2	19
58	Effects of wing-to-body mass ratio on insect flapping flights. <i>Physics of Fluids</i> , 2021, 33, .	4.0	19
59	A CFD data-driven aerodynamic model for fast and precise prediction of flapping aerodynamics in various flight velocities. <i>Journal of Fluid Mechanics</i> , 2021, 915, .	3.4	19
60	Effects of wing deformation on aerodynamic performance of a revolving insect wing. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2014, 30, 819-827.	3.4	18
61	Biomimetic Riblets Inspired by Sharkskin Denticles: Digitizing, Modeling and Flow Simulation. <i>Journal of Bionic Engineering</i> , 2018, 15, 999-1011.	5.0	18
62	Measurement of time-varying kinematics of a dolphin in burst accelerating swimming. <i>PLoS ONE</i> , 2019, 14, e0210860.	2.5	18
63	Blood flow dynamic improvement with aneurysm repair detected by a patient-specific model of multiple aortic aneurysms. <i>Heart and Vessels</i> , 2014, 29, 404-412.	1.2	17
64	Total Cavopulmonary Connection is Superior to Atriopulmonary Connection Fontan in Preventing Thrombus Formation: Computer Simulation of Flow-Related Blood Coagulation. <i>Pediatric Cardiology</i> , 2015, 36, 1436-1441.	1.3	17
65	Energy Efficient Joint User Association and Power Allocation in a Two-Tier Heterogeneous Network. , 2016, , .		17
66	Energy efficient power allocation and backhaul design in heterogeneous small cell networks. , 2016, , .		17
67	A simulation-based study on longitudinal gust response of flexible flapping wings. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2018, 34, 1048-1060.	3.4	17
68	Optimization of Motion of a Mechanical Pectoral Fin. <i>JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing</i> , 2003, 46, 1356-1362.	0.3	16
69	Gravitational effects on global hemodynamics in different postures: A closed-loop multiscale mathematical analysis. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2017, 33, 595-618.	3.4	16
70	Does a revolving wing stall at low Reynolds numbers?. <i>Journal of Biomechanical Science and Engineering</i> , 2015, 10, 15-00588-15-00588.	0.3	15
71	Effect of Ducted Multi-Propeller Configuration on Aerodynamic Performance in Quadrotor Drone. <i>Drones</i> , 2021, 5, 101.	4.9	15
72	Fishes regulate tail-beat kinematics to minimize speed-specific cost of transport. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2021, 288, 20211601.	2.6	15

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73	Bristled-wing design of materials, microstructures, and aerodynamics enables flapping flight in tiny wasps. <i>IScience</i> , 2022, 25, 103692.	4.1	15
74	Computational fluid dynamics study of the end-side and sequential coronary artery bypass anastomoses in a native coronary occlusion model. <i>Interactive Cardiovascular and Thoracic Surgery</i> , 2018, 26, 583-589.	1.1	14
75	Aerodynamic robustness in owl-inspired leading-edge serrations: a computational wind-gust model. <i>Bioinspiration and Biomimetics</i> , 2018, 13, 056002.	2.9	14
76	Recent R&D Technologies and Future Prospective of Flying Robot in Tough Robotics Challenge. <i>Springer Tracts in Advanced Robotics</i> , 2019, , 77-142.	0.4	14
77	Effects of Reynolds Number and Distribution on Passive Flow Control in Owl-Inspired Leading-Edge Serrations. <i>Integrative and Comparative Biology</i> , 2020, 60, 1135-1146.	2.0	14
78	A Three-axis PD Control Model for Bumblebee Hovering Stabilization. <i>Journal of Bionic Engineering</i> , 2018, 15, 494-504.	5.0	12
79	Computational investigation on a self-propelled pufferfish driven by multiple fins. <i>Ocean Engineering</i> , 2020, 197, 106908.	4.3	12
80	NUMERICAL AND EXPERIMENTAL STUDY ON THE RELATIONSHIP BETWEEN BLOOD CIRCULATION AND PERIPHERAL TEMPERATURE. <i>Journal of Mechanics in Medicine and Biology</i> , 2005, 05, 39-53.	0.7	11
81	Closed-form solution for the edge vortex of a revolving plate. <i>Journal of Fluid Mechanics</i> , 2017, 821, 200-218.	3.4	11
82	Multiscale modeling of the cardiovascular system for infants, children, and adolescents: Age-related alterations in cardiovascular parameters and hemodynamics. <i>Computers in Biology and Medicine</i> , 2019, 108, 200-212.	7.0	11
83	Evaluation of drag force of a thrip wing by using a microcantilever. <i>Journal of Applied Physics</i> , 2019, 126, 224701.	2.5	11
84	Modulation of Flight Muscle Recruitment and Wing Rotation Enables Hummingbirds to Mitigate Aerial Roll Perturbations. <i>Current Biology</i> , 2020, 30, 187-195.e4.	3.9	11
85	Aeroacoustic interaction between owl-inspired trailing-edge fringes and leading-edge serrations. <i>Physics of Fluids</i> , 2022, 34, .	4.0	11
86	Computation of Self-Propelled Swimming in Larva Fishes. <i>Journal of Biomechanical Science and Engineering</i> , 2009, 4, 54-66.	0.3	10
87	The Effects of Brachial Arterial Stiffening on The Accuracy of Oscillometric Blood Pressure Measurement: A Computational Model Study. <i>Journal of Biomechanical Science and Engineering</i> , 2012, 7, 15-30.	0.3	10
88	Exploring potential association between flow instability and rupture in patients with matched-pairs of ruptured"unruptured intracranial aneurysms. <i>BioMedical Engineering OnLine</i> , 2016, 15, 166.	2.7	10
89	Mathematical Modeling and Control of a Cost Effective AC Voltage Stabilizer. <i>IEEE Transactions on Power Electronics</i> , 2016, 31, 8007-8016.	7.9	10
90	Flexible Flaps Inspired by Avian Feathers Can Enhance Aerodynamic Robustness in low Reynolds Number Airfoils. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 612182.	4.1	10

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91	Computational Modeling of Left Ventricle Dynamics and Flow Based on Ultrasonographic Data. JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing, 2003, 46, 1321-1329.	0.3	9
92	Development of Mixed Flow Fans with Bio-Inspired Grooves. Biomimetics, 2019, 4, 72.	3.3	9
93	Simulation-based insect-inspired flight systems. Current Opinion in Insect Science, 2020, 42, 105-109.	4.4	9
94	A machine learning strategy for fast prediction of cardiac function based on peripheral pulse wave. Computer Methods and Programs in Biomedicine, 2022, 216, 106664.	4.7	9
95	Morphological effects of leading-edge serrations on the acoustic signatures of mixed flow fan. Physics of Fluids, 2022, 34, .	4.0	9
96	A Free-Flight Simulation of Insect Flapping Flight. Journal of Aero Aqua Bio-mechanisms, 2010, 1, 71-79.	1.0	8
97	On the interference of vorticity and pressure fields of a minimal fish school. Journal of Aero Aqua Bio-mechanisms, 2019, 8, 27-33.	1.0	8
98	Low Reynolds number aerodynamics of leading-edge and trailing-edge hinged control surfaces: Part I statics. Aerospace Science and Technology, 2020, 99, 105563.	4.8	8
99	A Biomimetic Rotor-configuration Design for Optimal Aerodynamic Performance in Quadrotor Drone. Journal of Bionic Engineering, 2021, 18, 824-839.	5.0	8
100	Dynamics of Actin Stress Fibers and Focal Adhesions during Slow Migration in Swiss 3T3 Fibroblasts: Intracellular Mechanism of Cell Turning. BioMed Research International, 2016, 2016, 1-16.	1.9	7
101	Flexibility Effects of a Flapping Mechanism Inspired by Insect Musculoskeletal System on Flight Performance. Frontiers in Bioengineering and Biotechnology, 2021, 9, 612183.	4.1	7
102	A slower rate of sulcal widening in the brains of the nondemented oldest old. NeuroImage, 2021, 229, 117740.	4.2	7
103	Hydrodynamical Fingerprint of a Neighbour in a Fish Lateral Line. Frontiers in Robotics and AI, 2022, 9, 825889.	3.2	7
104	THE INFLUENCES OF CARDIOVASCULAR PROPERTIES ON SUPRASYSTOLIC BRACHIAL CUFF WAVE STUDIED BY A SIMPLE ARTERIAL-TREE MODEL. Journal of Mechanics in Medicine and Biology, 2012, 12, 1250040.	0.7	6
105	Damage localization of marine risers using time series of vibration signals. Journal of Ocean University of China, 2014, 13, 777-781.	1.2	6
106	Body flexion effect on the flight dynamics of a hovering hawkmoth. Journal of Biomechanical Science and Engineering, 2014, 9, 14-00409-14-00409.	0.3	6
107	Fluid-structure interaction enhances the aerodynamic performance of flapping wings: a computational study. Journal of Biomechanical Science and Engineering, 2018, 13, 17-00666-17-00666.	0.3	6
108	Biomimetic Design Inspired Sharkskin Denticles and Modeling of Diffuser for Fluid Control. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2018, 31, 133-138.	0.3	6

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109	Effect of twist, camber and spanwise bending on the aerodynamic performance of flapping wings. Journal of Biomechanical Science and Engineering, 2018, 13, 17-00618-17-00618.	0.3	6
110	Aeroacoustic characteristics of owl-inspired blade designs in a mixed flow fan: effects of leading- and trailing-edge serrations. Bioinspiration and Biomimetics, 2021, 16, 066003.	2.9	6
111	Quantification of the influence of drugs on zebrafish larvae swimming kinematics and energetics. PeerJ, 2020, 8, e8374.	2.0	6
112	Compact Sphere-Shaped Airflow Vector Sensor Based on MEMS Differential Pressure Sensors. Sensors, 2022, 22, 1087.	3.8	6
113	Frequency-Based Wind Gust Estimation for Quadrotors Using a Nonlinear Disturbance Observer. IEEE Robotics and Automation Letters, 2022, 7, 9224-9231.	5.1	6
114	Computation of unsteady flow past a biomimetic fin. Journal of Bionic Engineering, 2004, 1, 108-120.	5.0	5
115	A Numerical Study on Mechanism of S-Starts of Northern Pike (Esox lucius). Journal of Hydrodynamics, 2007, 19, 135-142.	3.2	5
116	Aerodynamics and flight stability of a prototype flapping micro air vehicle. , 2012, , .		5
117	Aerodynamics and Flight Stability of Bio-inspired, Flapping-Wing Micro Air Vehicles. Intelligent Systems, Control and Automation: Science and Engineering, 2013, , 145-157.	0.5	5
118	Lift generation of hummingbird wing models with flexible loosened membranes. , 2013, , .		5
119	Fluid Vibration Induced by High-Shear-Rate Flow in a T-Junction. Journal of Fluids Engineering, Transactions of the ASME, 2016, 138, .	1.5	5
120	Computational fluid dynamic study of different incision length of coronary artery bypass grafting in a native coronary stenosis model. Journal of Thoracic Disease, 2019, 11, 393-399.	1.4	5
121	Exploring a bumblebee-inspired power-optimal flapping-wing design for hovering on Mars based on a surrogate model. Journal of Biomechanical Science and Engineering, 2020, 15, 20-00001-20-00001.	0.3	5
122	Aerodynamics of the Wells turbine with a Hawkmoth-inspired blade design. Bioinspiration and Biomimetics, 2020, 15, 066001.	2.9	5
123	Numerical study of three-dimensional flapping wings hovering in ultra-low-density atmosphere. Physics of Fluids, 2022, 34, .	4.0	5
124	Elastic storage enables robustness of flapping wing dynamics. Bioinspiration and Biomimetics, 2022, 17, 045003.	2.9	5
125	Effects of wing-body interaction on hawk moth aerodynamics and energetics at various flight velocities. Physics of Fluids, 2022, 34, .	4.0	5
126	An Un-Momentous Start to Life: Can Hydrodynamics Explain Why Fish Larvae Change Swimming Style?. Journal of Biomechanical Science and Engineering, 2009, 4, 37-53.	0.3	4

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127	Passive Dynamic Stability of a Hovering Fruit Fly: a Comparison between Linear and Nonlinear Methods. Journal of Biomechanical Science and Engineering, 2010, 5, 591-602.	0.3	4
128	Wing Morphology and Inertial Properties of Bumblebees. Journal of Aero Aqua Bio-mechanisms, 2019, 8, 41-47.	1.0	4
129	Impact of ductus arteriosus constriction and restrictive foramen ovale on global hemodynamics for term fetuses with dâ€™TA. International Journal for Numerical Methods in Biomedical Engineering, 2019, 37, e3231.	2.1	4
130	Machine learning predicts blood lactate levels in children after cardiac surgery in paediatric ICU. Cardiology in the Young, 2023, 33, 388-395.	0.8	4
131	A Numerical Analysis of Renal Arterial Hemodynamics in an Medical Image-based Model. Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 2004, 70, 1247-1253.	0.2	3
132	Dynamics of Free Straight Swimming of Angulla Angulla Including Forward, Braking And Backward Locomotion. Journal of Hydrodynamics, 2007, 19, 395-402.	3.2	3
133	Hemodynamic response to exercise in supine and standing attitudes: an integrated model. Journal of Biomechanical Science and Engineering, 2016, 11, 15-00523-15-00523.	0.3	3
134	Low-frequency harmonics in inlet flow rate play a crucial role in inducing flow instabilities in terminal cerebral aneurysms. Journal of Biomechanical Science and Engineering, 2016, 11, 16-00117-16-00117.	0.3	3
135	Repression of wall shear stress inside cerebral aneurysm at bifurcation of anterior cerebral artery by stents. Heart and Vessels, 2016, 31, 622-627.	1.2	3
136	Development of Microstructured Low Noise Propeller for Aerial Acoustic Surveillance. , 2021, , .		3
137	Personalized <scp>0Dâ€™1D</scp> multiscale hemodynamic modeling and wave dynamics analysis of cerebral circulation for an elderly patient with dementia. International Journal for Numerical Methods in Biomedical Engineering, 2021, 37, e3510.	2.1	3
138	Impact of Atrial Fibrillation on Fontan Circulation: Fontan Computational Model. Annals of Thoracic Surgery, 2022, 114, 1460-1467.	1.3	3
139	Intermittent control strategy can enhance stabilization robustness in bumblebee hovering. Bioinspiration and Biomimetics, 2021, 16, 016013.	2.9	3
140	Swimming Hydrodynamics and Maneuverability in C-Start of Zebrafish Larvae: An Integrated Computational Study. , 2011, , .		2
141	Liftoff of a New Hovering Oscillating-wing Micro Aerial Vehicle. Journal of Bionic Engineering, 2021, 18, 649-661.	5.0	2
142	A Parallel Numerical Method for Bio-Flow Analysis.. JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing, 2001, 44, 389-396.	0.3	1
143	Computation of unsteady flow past a biomimetic fin. Journal of Bionic Engineering, 2004, 1, 108-120.	5.0	1
144	Impact of the location of the fenestration on Fontan circulation haemodynamics: a three-dimensional, computational model study. Cardiology in the Young, 2017, 27, 1289-1294.	0.8	1

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145	Cell migration guided by a groove with branches. Journal of Biomechanical Science and Engineering, 2017, 12, 16-00613-16-00613.	0.3	1
146	Computational fluid dynamic study of multiple sequential coronary artery bypass anastomoses in a native coronary stenosis model. Coronary Artery Disease, 2020, 31, 458-463.	0.7	1
147	A six-degree-of-freedom proportional-derivative control strategy for bumblebee flight stabilization. Journal of Biomechanical Science and Engineering, 2021, 16, .	0.3	1
148	A Space-Time Analysis of Blood Flow In A 3D Vessel With Multiple Aneurysms. The Proceedings of the Computational Mechanics Conference, 2000, 2000.13, 197-198.	0.0	1
149	Effect of Passive Body Deformation of Hawkmoth on Flight Stability. Advances in Intelligent Systems and Computing, 2013, , 835-842.	0.6	1
150	PS1-11 EXPERIMENTAL MEASUREMENTS OF THROMBUS FORMATION UNDER FLUID FLOW IN MICRO CHANNEL(PS1: Poster Short Presentation I,Poster Session). The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics, 2015, 2015.8, 232.	0.0	1
151	Impact of Respiratory Fluctuation on Hemodynamics in Human Cardiovascular System: A 0-1D Multiscale Model. Fluids, 2022, 7, 28.	1.7	1
152	A MRI based semi-automatic modeling system for computational biomechanics simulation. , 0, ,		0
153	Development of Insect-Sized MAVs. , 2015, , 1329-1358.		0
154	Model-Based Study on the Hemodynamic Effects of Graduated Compression Stockings in Supine and Standing Positions. , 2018, ,		0
155	Orientation effects of bicuspid aortic valve with mild/severe aortic stenosis on aortic hemodynamics: a parametric study. Journal of Biomechanical Science and Engineering, 2019, 14, 18-00417-18-00417.	0.3	0
156	Hemodynamics of Renal Arterial Branch based on Medical Imaged Model. The Proceedings of the JSME Annual Meeting, 2004, 2004.6, 199-200.	0.0	0
157	Numerical Study of the Blood Flow and Living Tissue under Laser Irradiation. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2004, 2004.16, 191-192.	0.0	0
158	W04-(5) Novel Mechanisms in Biological Flight and Applications to Micro Air Vehicle(Requirements) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.0	0
159	A NUMERICAL STUDY ON FLUID DYNAMICS OF BACKWARD AND FORWARD SWIMMING IN THE EEL ANGUILLA ANGUILLA. , 2005, ,		0
160	414 A multi-scale simulation of blood flow at an aortorenal bifurcation under multiphysiological conditions. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2006, 2005.18, 247-248.	0.0	0
161	1134 A numerical study of dynamic flight stability of a flapping-flying insect. The Proceedings of the JSME Annual Meeting, 2007, 2007.6, 107-108.	0.0	0
162	1110 Flow Structure around Renal Artery Branch during Pulsatile Flow. The Proceedings of the JSME Annual Meeting, 2007, 2007.5, 287-288.	0.0	0

#	ARTICLE	IF	CITATIONS
163	1111 Quantitative Evaluation of the Performance of an Implanted Artificial Heart with a Lumped Parameter Model of the Human Circulatory System. The Proceedings of the JSME Annual Meeting, 2007, 2007.5, 289-290.	0.0	0
164	1109 A Computational Study of Renal Arterial Biomechanics with Stenosis. The Proceedings of the JSME Annual Meeting, 2007, 2007.5, 285-286.	0.0	0
165	736 A computational fluid dynamic study of forward flight stability in hawkmoth. The Proceedings of the JSME Annual Meeting, 2008, 2008.6, 87-88.	0.0	0
166	218 A computational fluid dynamic study of hummingbird hovering flight. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2008, 2007.20, 73-74.	0.0	0
167	723 A numerical study of unsteady aerodynamics in hummingbird hovering. The Proceedings of the JSME Annual Meeting, 2008, 2008.6, 61-62.	0.0	0
168	735 A study of natural modes and response of a hovering insect. The Proceedings of the JSME Annual Meeting, 2008, 2008.6, 85-86.	0.0	0
169	114 Investigation on multi-scale renal-arterial hemodynamics with consideration of stenosis and physiological conditions. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2008, 2007.20, 27-28.	0.0	0
170	127 Hemodynamic Structure around Renal Arterial Branch during Steady Flow. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2008, 2007.20, 261-262.	0.0	0
171	216 Aerodynamic investigation of forward flight stability in flapping insects. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2008, 2007.20, 69-70.	0.0	0
172	217 A numerical analysis of dynamic stability in insect flapping flight. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2008, 2007.20, 71-72.	0.0	0
173	733 Evaluation of aerodynamic performance of a four-flapping wing micro aerial vehicle. The Proceedings of the JSME Annual Meeting, 2008, 2008.6, 81-82.	0.0	0
174	119 Investigation on a multi-scale computation of hemodynamics in an integrated model of left ventricle, aorta, carotid artery, and thigh artery. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2008, 2007.20, 37-38.	0.0	0
175	220 A study of flapping micro aerial vehicles with a pair of cross wings. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2008, 2007.20, 77-78.	0.0	0
176	828 A multi-scale computation of ventricular-arterial (VA) coupled hemodynamics using an integrated LV artery model. The Proceedings of the JSME Annual Meeting, 2008, 2008.6, 113-114.	0.0	0
177	608 Evaluation of aerodynamic performance of a four-winged flapping micro aerial vehicle. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2009, 2008.21, 247-248.	0.0	0
178	610 A Study of forward flight stability in flapping insects with CFD and kinematic optimization. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2009, 2008.21, 251-252.	0.0	0
179	607 Nonlinear dynamic stability of a hovering insect. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2009, 2008.21, 245-246.	0.0	0
180	J0202-3-1 Investigation on propulsive performance and maneuverability in fish free swimming. The Proceedings of the JSME Annual Meeting, 2009, 2009.6, 147-148.	0.0	0

#	ARTICLE	IF	CITATIONS
181	W103 Multi-scale Biomechanisms and Biomimetics. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2009, 2008.21, 75.	0.0	0
182	J0202-1-4 Study of elastic wing deformation and aerodynamic performance for Flapping-Wing Micro Air Vehicles. The Proceedings of the JSME Annual Meeting, 2009, 2009.6, 131-132.	0.0	0
183	J0205-1-7 Study on insect-inspired wings and their mechanical properties. The Proceedings of the JSME Annual Meeting, 2010, 2010.6, 39-40.	0.0	0
184	J0205-1-3 Analysis of flow fields around mechanical flapping wings by using PIV measurements. The Proceedings of the JSME Annual Meeting, 2010, 2010.6, 31-32.	0.0	0
185	1127 Aerodynamic and Flight Dynamic Modeling of Butterfly Free Flight. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2010, 2009.22, 384.	0.0	0
186	0436 Three-dimensional simulation of fibrin network formation in secondary thrombus. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2010, 2009.22, 261.	0.0	0
187	J0206-2-6 Development of a patient-specific aortic aneurysm model based on computational biomechanics. The Proceedings of the JSME Annual Meeting, 2010, 2010.6, 95-96.	0.0	0
188	9E-15 Study of energy loss evaluation on blood flow in a patient-specific aortic aneurysm model. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2011, 2010.23, 529-530.	0.0	0
189	8I-03 Directly measuring surface pressures on a flapping wing of an insect-inspired robot. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2011, 2010.23, 167-168.	0.0	0
190	BC-JP-5 Computational Biomechanics of Passive and Active Cell Motion Based on Elastic Deformation and Fluid Flow. The Proceedings of Mechanical Engineering Congress Japan, 2012, 2012, _BC-JP-5-1-_BC-JP-5-5.	0.0	0
191	1D10 Flexible wing aerodynamics in forward flight of an ornithopter. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2013, 2013.25, 129-130.	0.0	0
192	2E05 Interaction of biological heat transportation of a circulatory system and hemodynamics. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2013, 2013.25, 393-394.	0.0	0
193	J021024 Computational modeling of right coronary artery hemodynamics with consideration of vessel wall dynamics. The Proceedings of Mechanical Engineering Congress Japan, 2013, 2013, _J021024-1-_J021024-5.	0.0	0
194	1D06 Phase difference between body undulation and pectoral fin oscillation can affect swimming hydrodynamics of fish larvae : a computational study. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2013, 2013.25, 121-122.	0.0	0
195	2E11 Computation of aortic blood flows with consideration of vessel wall deformations. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2013, 2013.25, 405-406.	0.0	0
196	2E10 Evaluation of the energy loss of blood flow in the aorta with the aneurysm. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2013, 2013.25, 403-404.	0.0	0
197	Effect of Passive Body Deformation of Hawkmoth on Flight Stability. Studies in Computational Intelligence, 2013, , 287-294.	0.9	0
198	2E04 Two-dimensional particle method simulation of thrombus formation after Fontan operation : effects of geometry of blood flow channel. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2013, 2013.25, 391-392.	0.0	0

#	ARTICLE	IF	CITATIONS
199	C103 Thrombus formation process in micro channel. The Proceedings of the JSME Conference on Frontiers in Bioengineering, 2014, 2014.25, 63-64.	0.0	0
200	1G41 Two-dimensional particle method simulation of thrombus formation after Fontan operation : comparison with the clinical data. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014, 2014.26, 241-242.	0.0	0
201	2G41 Motion analysis of forward flight of butterfly-inspired electric ornithopters. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014, 2014.26, 545-546.	0.0	0
202	C104 Particle method simulation of thrombus formation and dissolution considering medicinal effect. The Proceedings of the JSME Conference on Frontiers in Bioengineering, 2014, 2014.25, 65-66.	0.0	0
203	2G43 Effect of Wing Flexibility on Flight Ability of Flapping Flight. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014, 2014.26, 549-550.	0.0	0
204	2E24 Mechanical properties of cell cortex in mouse leukocyte migration. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014, 2014.26, 449-450.	0.0	0
205	2E26 Biomechanics simulation of thrombus formation using particle method : Effects of model parameter. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014, 2014.26, 453-454.	0.0	0
206	J0220302 Computational Fluid Dynamic Analysis of Dolphin Swimming Using a Three-dimensional Real-shape Model. The Proceedings of Mechanical Engineering Congress Japan, 2014, 2014, _J0220302-_J0220302-.	0.0	0
207	2G42 Flapping Wings with Functional Micro Wrinkles. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014, 2014.26, 547-548.	0.0	0
208	J0240204 Hemodynamic modeling of bicuspid aortic valve disease through left ventricle-aorta coupling. The Proceedings of Mechanical Engineering Congress Japan, 2014, 2014, _J0240204-_J0240204-.	0.0	0
209	J0240203 Evaluation of Wall Shear Stresses and Energy Loss in Aortic Aneurysms with Consideration of Wall Deformations. The Proceedings of Mechanical Engineering Congress Japan, 2014, 2014, _J0240203-_J0240203-.	0.0	0
210	2E16 Deformation of a capsule depends on a membrane's elastic model of out-of-plane bending. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014, 2014.26, 441-442.	0.0	0
211	1G23 Influence of boundary conditions on computation of right coronary artery hemodynamics with consideration of vessel dynamics and compliance. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2014, 2014.26, 223-224.	0.0	0
212	1C31 Study on cell migration pattern associated with difference in substrate stiffness. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2015, 2015.27, 115-116.	0.0	0
213	OS18-4 Analysis of Nuclear-Centrosomal Axis in HeLa Cells Using a Photoactivatable Substrate(Cell) Tj ETQq1 1 0.784314 rgBT /Overl International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2015, 2015.14, 238.	0.0	0
214	Analysis of Collective Cell Migration on Different Substrates by Template Matching. Journal of Life Support Engineering, 2015, 27, 97-104.	0.0	0
215	1C32 Orientation of nuclear centrosomal axis during cell polarity formation by control of cellular geometry. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2015, 2015.27, 117-118.	0.0	0
216	OS1-6 Flexible wing-and body-based strategies for bio-inspired flight system : aerodynamics and flight stability(OS1: Bio-inspired Flight System Biomechanics II). The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics, 2015, 2015.8, 67.	0.0	0

#	ARTICLE	IF	CITATIONS
217	J0210101 A Computational Auto-Regulation System : Integrative Simulation of the Cardiovascular System and the Autonomic Nervous System. The Proceedings of Mechanical Engineering Congress Japan, 2015, 2015, _J0210101-_J0210101-.	0.0	0
218	2A31 Integrated computation of left ventricle-aortic hemodynamics with consideration of bicuspid aortic valve disease. The Proceedings of the Bioengineering Conference Annual Meeting of BED/J SME, 2015, 2015.27, 321-322.	0.0	0
219	PS1-17 Quantifying the interplay between bicuspid aortic valve and aortic hemodynamics : an integrative computational study(PS1: Poster Short Presentation I,Poster Session). The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics, 2015, 2015.8, 238.	0.0	0
220	2A22 On the uncertainty of simulation-based prediction of pulse wave propagation in the cardiovascular system. The Proceedings of the Bioengineering Conference Annual Meeting of BED/J SME, 2015, 2015.27, 313-314.	0.0	0
221	OS1-3 DYNAMICS OF HUMMINGBIRDS FLYING IN HIGHLY TURBULENT WINDS(OS1: Bio-inspired Flight System) Tj ETQq1 1 0.784314 and Technology in Biomechanics, 2015, 2015.8, 64.	0.0	0
222	2B22 On the flight dynamic stability of a pyramid-shaped flyer. The Proceedings of the Bioengineering Conference Annual Meeting of BED/J SME, 2015, 2015.27, 355-356.	0.0	0
223	1A14 Particle method computer simulation of arterial thrombus depending on shear rate. The Proceedings of the Bioengineering Conference Annual Meeting of BED/J SME, 2015, 2015.27, 9-10.	0.0	0
224	2B24 Optimization of bio-inspired small wind turbine blades. The Proceedings of the Bioengineering Conference Annual Meeting of BED/J SME, 2015, 2015.27, 359-360.	0.0	0
225	J0210102 Dependency of 3D Hemodynamics in Fontan Procedure on Fenestration Location. The Proceedings of Mechanical Engineering Congress Japan, 2015, 2015, _J0210102-_J0210102-.	0.0	0
226	PS3-8 COMPUTER SIMULATION OF MEDICINAL EFFECT ON THROMBUS FORMATION USING PARTICLE METHOD(PS3: Poster Short Presentation III,Poster Session). The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics, 2015, 2015.8, 269.	0.0	0
227	2B21 Assessing aerodynamic performance of hummingbird-inspired flapping system. The Proceedings of the Bioengineering Conference Annual Meeting of BED/J SME, 2015, 2015.27, 353-354.	0.0	0
228	PS1-18 Simulation of the Cardiovascular Autonomic Functions : Integrating the Cardiovascular System and the Autonomic Nervous System(PS1: Poster Short Presentation I,Poster Session). The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics, 2015, 2015.8, 239.	0.0	0
229	1E44 Evaluation of Heart Disease Functions during One-leg Exercise through Coupling Cardiovascular System and Autonomic Nervous System. The Proceedings of the Bioengineering Conference Annual Meeting of BED/J SME, 2016, 2016.28, _1E44-1_-_1E44-5_.	0.0	0
230	1C32 Influence of wing flexibility on hovering flight stability under disturbances. The Proceedings of the Bioengineering Conference Annual Meeting of BED/J SME, 2016, 2016.28, _1C32-1_-_1C32-5_.	0.0	0
231	Bio-inspired flight system and biomimetic micro air vehicles. The Proceedings of the Bioengineering Conference Annual Meeting of BED/J SME, 2016, 2016.28, C2.	0.0	0
232	Evaluation of Cardiac Function in Patients during Exercise by Coupling Cardiovascular and Autonomic Nervous Systems. The Proceedings of Mechanical Engineering Congress Japan, 2016, 2016, J0220103.	0.0	0
233	1E46 Dependency of Fenestration Location on Hemodynamics in Fontan with Consideration of Physiological Functions. The Proceedings of the Bioengineering Conference Annual Meeting of BED/J SME, 2016, 2016.28, _1E46-1_-_1E46-5_.	0.0	0
234	Aerodynamic characteristics of small wind-turbine wing inspired by bird wing. The Proceedings of the Bioengineering Conference Annual Meeting of BED/J SME, 2017, 2017.29, 2F44.	0.0	0

#	ARTICLE	IF	CITATIONS
235	The impact of insect wing shape on the formation of leading edge vortex. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2017, 2017.29, 2F22.	0.0	0
236	Computational Fluid Dynamic Modeling of Dolphin Swimming and Analysis of Thrust-Generating Mechanism with Oscillating Tail Fin and Body. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2017, 2017.29, 2F35.	0.0	0
237	A biomimetic blade design for regenerative blower with owl-inspired serrations. The Proceedings of the JSME Conference on Frontiers in Bioengineering, 2018, 2018.29, 2C34.	0.0	0
238	Impact of bicuspid aortic valve morphology on hemodynamics in the aorta:. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2018, 2018.30, 2I07.	0.0	0
239	Robustness strategies in bio-inspired flight systems: morphology, dynamics, and flight control. , 2018, , .		0
240	Modulation of Flight Muscle Recruitment and Wing Rotation Enables Hummingbirds to Mitigate Aerial Roll Perturbations. SSRN Electronic Journal, 0, , .	0.4	0
241	Effects of tail fin kinematics on propulsive performance in dolphin swimming. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2019, 2019.31, 1D23.	0.0	0
242	10.1063/5.0088851.1. , 2022, , .		0
243	10.1063/5.0088851.2. , 2022, , .		0
244	Blood Flow Simulation to Determine the Risk of Thrombosis in the Fontan Circulation: Comparison between Atriopulmonary and Total Cavopulmonary Connections. Fluids, 2022, 7, 138.	1.7	0
245	10.1063/5.0088851.4. , 2022, , .		0
246	10.1063/5.0088851.6. , 2022, , .		0
247	10.1063/5.0088851.3. , 2022, , .		0
248	10.1063/5.0088851.5. , 2022, , .		0
249	10.1063/5.0087161.1. , 2022, , .		0