

Toshiyuki Nakata

List of Publications by Year in descending order

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42
papers

989
citations

516710

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42
times ranked

854
citing authors

#	ARTICLE	IF	CITATIONS
1	Compact Sphere-Shaped Airflow Vector Sensor Based on MEMS Differential Pressure Sensors. <i>Sensors</i> , 2022, 22, 1087.	3.8	6
2	10.1063/5.0088851.1. , 2022, , .		0
3	10.1063/5.0088851.2. , 2022, , .		0
4	Morphological effects of leading-edge serrations on the acoustic signatures of mixed flow fan. <i>Physics of Fluids</i> , 2022, 34, .	4.0	9
5	10.1063/5.0088851.4. , 2022, , .		0
6	10.1063/5.0088851.6. , 2022, , .		0
7	10.1063/5.0088851.3. , 2022, , .		0
8	10.1063/5.0088851.5. , 2022, , .		0
9	Development of Microstructured Low Noise Propeller for Aerial Acoustic Surveillance. , 2021, , .		3
10	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
11	Flight behavior of four species of Holotrichia chafer (Coleoptera: Scarabaeidae) with different habitat use. <i>Applied Entomology and Zoology</i> , 2021, 56, 259-267.	1.2	1
12	Flexibility Effects of a Flapping Mechanism Inspired by Insect Musculoskeletal System on Flight Performance. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 612183.	4.1	7
13	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
14	Aeroacoustic characteristics of owl-inspired blade designs in a mixed flow fan: effects of leading- and trailing-edge serrations. <i>Bioinspiration and Biomimetics</i> , 2021, 16, 066003.	2.9	6
15	Intermittent control strategy can enhance stabilization robustness in bumblebee hovering. <i>Bioinspiration and Biomimetics</i> , 2021, 16, 016013.	2.9	3
16	Aerodynamic imaging by mosquitoes inspires a surface detector for autonomous flying vehicles. <i>Science</i> , 2020, 368, 634-637.	12.6	46
17	Recent progress on the flight of dragonflies and damselflies. <i>International Journal of Odonatology</i> , 2020, 23, 41-49.	0.5	7
18	Development of Mixed Flow Fans with Bio-Inspired Grooves. <i>Biomimetics</i> , 2019, 4, 72.	3.3	9

#	ARTICLE	IF	CITATIONS
19	The dynamics of passive feathering rotation in hovering flight of bumblebees. <i>Journal of Fluids and Structures</i> , 2019, 91, 102628.	3.4	31
20	Effects of tail fin kinematics on propulsive performance in dolphin swimming. <i>The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSM E</i> , 2019, 2019.31, 1D23.	0.0	0
21	Fluid-structure interaction enhances the aerodynamic performance of flapping wings: a computational study. <i>Journal of Biomechanical Science and Engineering</i> , 2018, 13, 17-00666-17-00666.	0.3	6
22	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
23	Development of Bio-Inspired Low-Noise Propeller for a Drone. <i>Journal of Robotics and Mechatronics</i> , 2018, 30, 337-343.	1.0	20
24	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
25	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
26	Effect of twist, camber and spanwise bending on the aerodynamic performance of flapping wings. <i>Journal of Biomechanical Science and Engineering</i> , 2018, 13, 17-00618-17-00618.	0.3	6
27	Robustness strategies in bio-inspired flight systems: morphology, dynamics, and flight control. , 2018, , .		0
28	Smart wing rotation and trailing-edge vortices enable high frequency mosquito flight. <i>Nature</i> , 2017, 544, 92-95.	27.8	181
29	Quantifying the dynamic wing morphing of hovering hummingbird. <i>Royal Society Open Science</i> , 2017, 4, 170307.	2.4	28
30	Unsteady bio-fluid dynamics in flying and swimming. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2017, 33, 663-684.	3.4	39
31	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
32	Flight of the dragonflies and damselflies. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2016, 371, 20150389.	4.0	97
33	Enhanced flight performance by genetic manipulation of wing shape in <i>Drosophila</i> . <i>Nature Communications</i> , 2016, 7, 10851.	12.8	63
34	A CFD-informed quasi-steady model of flapping-wing aerodynamics. <i>Journal of Fluid Mechanics</i> , 2015, 783, 323-343.	3.4	70
35	Aerodynamics and flight stability of a prototype flapping micro air vehicle. , 2012, , .		5
36	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

#	ARTICLE	IF	CITATIONS
37	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
38	Micro air vehicle-motivated computational biomechanics in bio-flights: aerodynamics, flight dynamics and maneuvering stability. Acta Mechanica Sinica/Lixue Xuebao, 2010, 26, 863-879.	3.4	41
39	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
40	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
41	611 Evaluation of Aerodynamic Characteristics of Insect Flapping Wings by Fluid-Structure Interaction Analysis. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2009, 2008.21, 253-254.	0.0	0
42	Development of active CFRP/aluminum laminates and their demonstrations. Journal of Advanced Science, 2006, 18, 6-9.	0.1	0