Fritz-Olaf Lehmann

List of Publications by Year
in descending order

35	3,562	471061 17	377514 34
papers	citations	h-index	g-index

37	37	37	1698
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Flight activity and age cause wing damage in house flies. Journal of Experimental Biology, 2022, 225, .	0.8	6
2	Novel flight style and light wings boost flight performance of tiny beetles. Nature, 2022, 602, 96-100.	13.7	39
3	Efficiency and Aerodynamic Performance of Bristled Insect Wings Depending on Reynolds Number in Flapping Flight. Fluids, 2022, 7, 75.	0.8	4
4	Vortex trapping recaptures energy in flying fruit flies. Scientific Reports, 2021, 11, 6992.	1.6	5
5	Flight efficiency is a key to diverse wing morphologies in small insects. Journal of the Royal Society Interface, 2021, 18, 20210518.	1.5	12
6	An experimental data-driven mass-spring model of ï¬,exible Calliphora wings. Bioinspiration and Biomimetics, 2021, , .	1.5	2
7	Wing Design in Flies: Properties and Aerodynamic Function. Insects, 2020, 11, 466.	1.0	15
8	Aerodynamic performance of a bristled wing of a very small insect. Experiments in Fluids, 2020, 61, 1.	1.1	31
9	Resilin matrix distribution, variability and function in Drosophila. BMC Biology, 2020, 18, 195.	1.7	23
10	Aerodynamic interference depends on stroke plane spacing and wing aspect ratio in damselfly model wings. International Journal of Odonatology, 2020, 23, 51-61.	0.5	2
11	Three-dimensional wing structure attenuates aerodynamic efficiency in flapping fly wings. Journal of the Royal Society Interface, 2020, 17, 20190804.	1.5	15
12	Dynamics of body kinematics of freely flying houseflies responding to air turbulence. Journal of Asia-Pacific Entomology, 2019, 22, 1082-1089.	0.4	0
13	Local deformation and stiffness distribution in fly wings. Biology Open, 2019, 8, .	0.6	22
14	Impact of turbulence on flying insects in tethered and free flight: High-resolution numerical experiments. Physical Review Fluids, 2019, 4, .	1.0	14
15	Sensory processing by motoneurons: a numerical model for low-level flight control in flies. Journal of the Royal Society Interface, 2018, 15, 20180408.	1.5	8
16	Neural control and precision of flight muscle activation in Drosophila. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2017, 203, 1-14.	0.7	24
17	Proprioceptive feedback determines visuomotor gain inDrosophila. Royal Society Open Science, 2016, 3, 150562.	1.1	27
18	Body appendages fine-tune posture and moments in freely manoeuvring fruit flies. Journal of Experimental Biology, 2015, 218, 3295-307.	0.8	16

#	Article	IF	Citations
19	Calcium signalling indicates bilateral power balancing in theDrosophilaflight muscle during manoeuvring flight. Journal of the Royal Society Interface, 2013, 10, 20121050.	1.5	22
20	Wake Structure and Vortex Development in Flight of Fruit Flies Using High-Speed Particle Image Velocimetry. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2012, , 65-79.	0.2	2
21	Experimental Quantification and Numerical Simulation of Unsteady Flow Conditions during Free Flight Maneuvers of Insects. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2012, , 81-99.	0.2	4
22	Elastic deformation and energy loss of flapping fly wings. Journal of Experimental Biology, 2011, 214, 2949-2961.	0.8	82
23	The role of experience in flight behaviour ofDrosophila. Journal of Experimental Biology, 2009, 212, 3377-3386.	0.8	15
24	Wingâ€“wake interaction reduces power consumption in insect tandem wings. Experiments in Fluids, 2009, 46, 765-775.	1.1	63
25	Phasing of dragonfly wings can improve aerodynamic efficiency by removing swirl. Journal of the Royal Society Interface, 2008, 5, 1303-1307.	1.5	121
26	The free-flight response ofDrosophilato motion of the visual environment. Journal of Experimental Biology, 2008, 211, 2026-2045.	0.8	84
27	Turning behaviour depends on frictional damping in the fruit flyDrosophila. Journal of Experimental Biology, 2007, 210, 4319-4334.	0.8	47
28	The aerodynamic benefit of wingâ€“wing interaction depends on stroke trajectory in flapping insect wings. Journal of Experimental Biology, 2007, 210, 1362-1377.	0.8	95
29	Dynamics of in vivo power output and efficiency of Nasonia asynchronous flight muscle. Journal of Biotechnology, 2006, 124, 93-107.	1.9	14
30	Flight muscle properties and aerodynamic performance of Drosophila expressing a flightin transgene. Journal of Experimental Biology, 2005, 208, 549-560.	0.8	31
31	The aerodynamic effects of wingâ€“wing interaction in flapping insect wings. Journal of Experimental Biology, 2005, 208, 3075-3092.	0.8	172
32	The fluid dynamics of flight control by kinematic phase lag variation between two robotic insect wings. Journal of Experimental Biology, 2004, 207, 4707-4726.	0.8	147
33	The efficiency of aerodynamic force production in Drosophila. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2001, 131, 77-88.	0.8	27
34	Wing Rotation and the Aerodynamic Basis of Insect Flight. Science, 1999, 284, 1954-1960.	6.0	2,314
35	The Control of Mechanical Power in Insect Flight. American Zoologist, 1998, 38, 718-728.	0.7	53