Sawyer B Fuller

List of Publications by Year
in descending order

30 papers	1,740 citations	759233 12 h-index	1058476 14 g-index
30 all docs	30 docs citations	30 times ranked	1728 citing authors

#	Article	IF	Citations
1	Ultralow-Power Localization of Insect-Scale Drones: Interplay of Probabilistic Filtering and Compute-in-Memory. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2022, 30, 68-80.	3.1	9
2	Towards Sensor Autonomy in Sub-Gram Flying Insect Robots: A Lightweight and Power-Efficient Avionics System. , 2022, , .		3
3	Yaw Control of a Hovering Flapping-Wing Aerial Vehicle With a Passive Wing Hinge. IEEE Robotics and Automation Letters, 2021, 6, 1864-1871.	5.1	15
4	RoboFly: An Insect-Sized Robot With Simplified Fabrication That Is Capable of Flight, Ground, and Water Surface Locomotion. IEEE Transactions on Robotics, 2021, 37, 2025-2040.	10.3	26
5	A high-voltage power electronics unit for flying insect robots that can modulate wing thrust. , 2021, , .		5
6	Toward battery-free flight: Duty cycled recharging of small drones. , 2021, , .		8
7	Wireless steerable vision for live insects and insect-scale robots. Science Robotics, 2020, 5, .	17.6	50
8	A Device for Rapid, Automated Trimming of Insect-Sized Flying Robots. IEEE Robotics and Automation Letters, 2020, 5, 1373-1380.	5.1	19
9	A laser-microfabricated electrohydrodynamic thruster for centimeter-scale aerial robots. PLoS ONE, 2020, 15, e0231362.	2.5	13
10	A bio-hybrid odor-guided autonomous palm-sized air vehicle. Bioinspiration and Biomimetics, 2020, 16, 026002.	2.9	36
11	Rapid Inertial Reorientation of an Aerial Insect-sized Robot Using a Piezo-actuated Tail. , 2019, , .		8
12	Living IoT. , 2019, , .		61
13	Four Wings: An Insect-Sized Aerial Robot With Steering Ability and Payload Capacity for Autonomy. IEEE Robotics and Automation Letters, 2019, 4, 570-577.	5.1	48
14	The â€œSmellicopter,â€•a bio-hybrid odor localizing nano air vehicle. , 2019, , .		11
15	Altitude Estimation and Control of an Insect-Scale Robot with an Onboard Proximity Sensor. Springer Proceedings in Advanced Robotics, 2018, , 57-69.	1.3	9
16	A New Robot Fly Design That is Easier to Fabricate and Capable of Flight and Ground Locomotion. , 2018, , .		18
17	Liftoff of a 190 mg Laser-Powered Aerial Vehicle: The Lightest Wireless Robot to Fly. , 2018, , .		78
18	An Insect-Sized Robot That Uses a Custom-Built Onboard Camera and a Neural Network to Classify and Respond to Visual Input. , 2018, , .		11

#	Article	IF	Citations
19	Stabilizing air dampers for hovering aerial robotics: design, insect-scale flight tests, and scaling. Autonomous Robots, 2017, 41, 1555-1573.	4.8	13
20	A blade element approach to modeling aerodynamic flight of an insect-scale robot. , 2017, , .		5
21	Quadrobee: Simulating flapping wing aerial vehicle dynamics on a quadrotor. , 2017, , .		2
22	Spiking neural network (SNN) control of a flapping insect-scale robot. , 2016, , .		33
23	Rotating the heading angle of underactuated flapping-wing flyers by wriggle-steering. , 2015, , .		6
24	Controlling free flight of a robotic fly using an onboard vision sensor inspired by insect ocelli. Journal of the Royal Society Interface, 2014, 11, 20140281.	3.4	98
25	Estimating attitude and wind velocity using biomimetic sensors on a microrobotic bee. , 2013, , .		33
26	Controlled Flight of a Biologically Inspired, Insect-Scale Robot. Science, 2013, 340, 603-607.	12.6	873
27	A hovercraft robot that uses insect-inspired visual autocorrelation for motion control in a corridor. , 2011, , .		18
28	A bio-plausible design for visual attitude stabilization. , 2009, , .		12
29	Biologically Inspired Feedback Design for Drosophila Flight. Proceedings of the American Control Conference, 2007, , .	0.0	14
30	A fast flexible ink-jet printing method for patterning dissociated neurons in culture. Journal of Neuroscience Methods, 2004, 136, 151-163.	2.5	205