

Weiping Zhang

List of Publications by Year in descending order

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48
papers

678
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759233

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25
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48
all docs

48
docs citations

48
times ranked

536
citing authors

#	ARTICLE	IF	CITATIONS
1	The development of micro-gyroscope technology. Journal of Micromechanics and Microengineering, 2009, 19, 113001.	2.6	163
2	Liftoff of an Electromagnetically Driven Insect-Inspired Flapping-Wing Robot. IEEE Transactions on Robotics, 2016, 32, 1285-1289.	10.3	121
3	The study of an electromagnetic levitating micromotor for application in a rotating gyroscope. Sensors and Actuators A: Physical, 2006, 132, 651-657.	4.1	48
4	The design and micromachining of an electromagnetic MEMS flapping-wing micro air vehicle. Microsystem Technologies, 2012, 18, 127-136.	2.0	43
5	An innovative micro-diamagnetic levitation system with coils applied in micro-gyroscope. Microsystem Technologies, 2010, 16, 431-439.	2.0	29
6	The design and microfabrication of a sub 100 μ g insect-scale flapping-wing robot. Micro and Nano Letters, 2017, 12, 297-300.	1.3	25
7	Wing geometry and kinematic parameters optimization of flapping wing hovering flight for minimum energy. Aerospace Science and Technology, 2017, 64, 192-203.	4.8	19
8	NTC thin film temperature sensors for cryogenics region with high sensitivity and thermal stability. Applied Physics Letters, 2018, 113, .	3.3	19
9	Piezoelectric driven insect-inspired robot with flapping wings capable of skating on the water. Electronics Letters, 2017, 53, 579-580.	1.0	15
10	Design and experiment of a PDMS-based PCR chip with reusable heater of optimized electrode. Microsystem Technologies, 2017, 23, 3069-3079.	2.0	14
11	A Sub-100 mg Electromagnetically Driven Insect-inspired Flapping-wing Micro Robot Capable of Liftoff and Control Torques Modulation. Journal of Bionic Engineering, 2020, 17, 1085-1095.	5.0	14
12	The modeling and numerical solution for flapping wing hovering wingbeat dynamics. Aerospace Science and Technology, 2021, 110, 106474.	4.8	14
13	Modeling and simulation of levitation control for a micromachined electrostatically suspended gyroscope. Microsystem Technologies, 2010, 16, 357-366.	2.0	13
14	A novel safety device with metal counter meshing gears discriminator directly driven by axial flux permanent magnet micromotors based on MEMS technology. Journal of Micromechanics and Microengineering, 2005, 15, 1601-1606.	2.6	11
15	Electroplated hard magnetic material and its application in microelectromechanical systems. IEEE Transactions on Magnetics, 2005, 41, 4380-4383.	2.1	10
16	Monolithic fabrication of an insect-scale self-lifting flapping-wing robot. Micro and Nano Letters, 2018, 13, 267-269.	1.3	10
17	Numerical simulation of flapping-wing insect hovering flight at unsteady flow. International Journal for Numerical Methods in Fluids, 2007, 53, 1801-1817.	1.6	9
18	Design and fabrication of an electrostatically suspended microgyroscope using UV-LIGA technology. Microsystem Technologies, 2009, 15, 1885-1896.	2.0	9

#	ARTICLE	IF	CITATIONS
19	Design, modeling and analysis of highly reliable capacitive microaccelerometer based on circular stepped-plate and small-area touch mode. <i>Microelectronics Reliability</i> , 2012, 52, 1373-1381.	1.7	9
20	A MEMS piezoelectric solid disk gyroscope with improved sensitivity. <i>Microsystem Technologies</i> , 2015, 21, 1371-1377.	2.0	8
21	Development of an Insect-like Flapping-Wing Micro Air Vehicle with Parallel Control Mechanism. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 3509.	2.5	7
22	Development of Flapping-wing Micro Air Vehicle in Asia. , 2012, , .		6
23	Numerical analysis of the three-dimensional aerodynamics of a hovering rufous hummingbird (<i>Selasphorus rufus</i>). <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2015, 31, 931-943.	3.4	6
24	Electromechanical coupling analysis for MEMS featured by stepped-height structure and concentrated load. <i>Microsystem Technologies</i> , 2009, 15, 621-635.	2.0	5
25	Wing Geometry and Kinematic Parameters Optimization of Flapping Wing Hovering Flight. <i>Applied Sciences (Switzerland)</i> , 2016, 6, 390.	2.5	5
26	Piezoelectric-driven self-assembling micro air vehicle with bionic reciprocating wings. <i>Electronics Letters</i> , 2018, 54, 551-552.	1.0	5
27	Design of a novel gear-like disk resonator gyroscope with high mechanical sensitivity. <i>Microsystem Technologies</i> , 2021, 27, 2715-2722.	2.0	5
28	The Development of a Portable Hard Disk Encryption/Decryption System with a MEMS Coded Lock. <i>Sensors</i> , 2009, 9, 9300-9331.	3.8	4
29	Electromagnetic levitation micromotor with stator embedded (ELMSE): levitation and lateral stability characteristics analysis. <i>Microsystem Technologies</i> , 2011, 17, 59-69.	2.0	4
30	Piezoelectric-driven miniature wheeled robot based on flexible transmission mechanisms. <i>Microsystem Technologies</i> , 2018, 24, 943-950.	2.0	4
31	Modeling of Beams'™ Multiple-Contact Mode with an Application in the Design of a High-g Threshold Microaccelerometer. <i>Sensors</i> , 2011, 11, 5215-5228.	3.8	3
32	An integrated temperature-compensated flexible shear-stress sensor microarray with concentrated leading-wire. <i>Review of Scientific Instruments</i> , 2016, 87, 025001.	1.3	3
33	Equivalent circuit of piezoelectric resonant disk gyroscope through admittance circle method. <i>Micro and Nano Letters</i> , 2016, 11, 854-856.	1.3	3
34	Research on a micromachined flexible hot-wire sensor array for underwater wall shear stress measurement. <i>Microsystem Technologies</i> , 2017, 23, 2781-2788.	2.0	3
35	Simulation of Electrostatically Suspended Micro-gyroscope Based on LabVIEW. , 2011, , .		2
36	Research on a Micro Piezoelectric Gyroscope with Concentrated Rocking-Mass. <i>International Journal of Applied Ceramic Technology</i> , 2015, 12, E208-E214.	2.1	2

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37	Fabrication and characterisation of microscale hemispherical shell resonator with diamond electrodes on the Si substrate. <i>Micro and Nano Letters</i> , 2019, 14, 674-677.	1.3	2
38	A micro monolithic integrated force-torque sensor with piezoelectric tuning mechanism. <i>Microsystem Technologies</i> , 2020, 26, 2879-2886.	2.0	2
39	Horizontal take-off of an insect-like FMAV based on stroke plane modulation. <i>Aircraft Engineering and Aerospace Technology</i> , 2022, ahead-of-print, .	1.2	2
40	Single-neuron spinning control system for a non-silicon micromachined rotational gyro. , 2009, , .		1
41	Hybrid process of fabricating high-quality micro wine-glass fused silica resonators. <i>Journal of Shanghai Jiaotong University (Science)</i> , 2017, 22, 274-279.	0.9	1
42	Optimization design of an electrostatically suspended microgyroscope. , 2010, , .		0
43	Polymerase chain reaction chip with microchannel of glass capillaries embedded. <i>Electronics Letters</i> , 2015, 51, 1748-1750.	1.0	0
44	Miniature hemispherical shell resonator with large-scale effective electrodes based on piezoelectric drive mechanism. <i>Review of Scientific Instruments</i> , 2016, 87, 055004.	1.3	0
45	Thermoelastic Dissipation in Diamond Micro Hemispherical Shell Resonators. <i>Journal of Shanghai Jiaotong University (Science)</i> , 2020, 25, 281-287.	0.9	0
46	A Modified Quasisteady Aerodynamic Model for a Sub-100mg Insect-Inspired Flapping-Wing Robot. <i>Applied Bionics and Biomechanics</i> , 2020, 2020, 1-12.	1.1	0
47	Design, takeoff and steering torques modulation of an 80mg insect-scale flapping-wing robot. <i>Micro and Nano Letters</i> , 2020, 15, 1079-1083.	1.3	0
48	Measurements of angle of attack for a sub-100mg insect-inspired micro aerial vehicle. , 2020, , .		0