

# Weiping Zhang

## List of Publications by Year in descending order

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48  
papers

678  
citations

759233

12  
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580821

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48  
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48  
docs citations

48  
times ranked

536  
citing authors

#	ARTICLE	IF	CITATIONS
1	Horizontal take-off of an insect-like FMAV based on stroke plane modulation. Aircraft Engineering and Aerospace Technology, 2022, ahead-of-print, .	1.2	2
2	Development of an Insect-like Flapping-Wing Micro Air Vehicle with Parallel Control Mechanism. Applied Sciences (Switzerland), 2022, 12, 3509.	2.5	7
3	Design of a novel gear-like disk resonator gyroscope with high mechanical sensitivity. Microsystem Technologies, 2021, 27, 2715-2722.	2.0	5
4	The modeling and numerical solution for flapping wing hovering wingbeat dynamics. Aerospace Science and Technology, 2021, 110, 106474.	4.8	14
5	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
6	Thermoelastic Dissipation in Diamond Micro Hemispherical Shell Resonators. Journal of Shanghai Jiaotong University (Science), 2020, 25, 281-287.	0.9	0
7	A micro monolithic integrated force-torque sensor with piezoelectric tuning mechanism. Microsystem Technologies, 2020, 26, 2879-2886.	2.0	2
8	A Modified Quasisteady Aerodynamic Model for a Sub-100mg Insect-Inspired Flapping-Wing Robot. Applied Bionics and Biomechanics, 2020, 2020, 1-12.	1.1	0
9	Design, takeoff and steering torques modulation of an 80mg insect-scale flapping-wing robot. Micro and Nano Letters, 2020, 15, 1079-1083.	1.3	0
10	Measurements of angle of attack for a sub-100mg insect-inspired micro aerial vehicle. , 2020, , .		0
11	Fabrication and characterisation of microscale hemispherical shell resonator with diamond electrodes on the Si substrate. Micro and Nano Letters, 2019, 14, 674-677.	1.3	2
12	Monolithic fabrication of an insect-scale self-lifting flapping-wing robot. Micro and Nano Letters, 2018, 13, 267-269.	1.3	10
13	Piezoelectric-driven miniature wheeled robot based on flexible transmission mechanisms. Microsystem Technologies, 2018, 24, 943-950.	2.0	4
14	NTC thin film temperature sensors for cryogenics region with high sensitivity and thermal stability. Applied Physics Letters, 2018, 113, .	3.3	19
15	Piezoelectric-driven self-assembling micro air vehicle with bionic reciprocating wings. Electronics Letters, 2018, 54, 551-552.	1.0	5
16	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
17	The design and microfabrication of a sub 100mg insect-scale flapping-wing robot. Micro and Nano Letters, 2017, 12, 297-300.	1.3	25
18	Hybrid process of fabricating high-quality micro wine-glass fused silica resonators. Journal of Shanghai Jiaotong University (Science), 2017, 22, 274-279.	0.9	1

#	ARTICLE	IF	CITATIONS
19	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
20	Design and experiment of a PDMS-based PCR chip with reusable heater of optimized electrode. <i>Microsystem Technologies</i> , 2017, 23, 3069-3079.	2.0	14
21	Piezoelectric driven insect-inspired robot with flapping wings capable of skating on the water. <i>Electronics Letters</i> , 2017, 53, 579-580.	1.0	15
22	Wing Geometry and Kinematic Parameters Optimization of Flapping Wing Hovering Flight. <i>Applied Sciences (Switzerland)</i> , 2016, 6, 390.	2.5	5
23	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
24	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
25	Liftoff of an Electromagnetically Driven Insect-Inspired Flapping-Wing Robot. <i>IEEE Transactions on Robotics</i> , 2016, 32, 1285-1289.	10.3	121
26	Equivalent circuit of piezoelectric resonant disk gyroscope through admittance circle method. <i>Micro and Nano Letters</i> , 2016, 11, 854-856.	1.3	3
27	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
28	Polymerase chain reaction chip with microchannel of glass capillaries embedded. <i>Electronics Letters</i> , 2015, 51, 1748-1750.	1.0	0
29	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
30	A MEMS piezoelectric solid disk gyroscope with improved sensitivity. <i>Microsystem Technologies</i> , 2015, 21, 1371-1377.	2.0	8
31	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
32	Development of Flapping-wing Micro Air Vehicle in Asia. , 2012, , .		6
33	The design and micromachining of an electromagnetic MEMS flapping-wing micro air vehicle. <i>Microsystem Technologies</i> , 2012, 18, 127-136.	2.0	43
34	Simulation of Electrostatically Suspended Micro-gyroscope Based on LabVIEW. , 2011, , .		2
35	Electromagnetic levitation micromotor with stator embedded (ELMSE): levitation and lateral stability characteristics analysis. <i>Microsystem Technologies</i> , 2011, 17, 59-69.	2.0	4
36	Modeling of Beamsâ€™ 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

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37	Modeling and simulation of levitation control for a micromachined electrostatically suspended gyroscope. <i>Microsystem Technologies</i> , 2010, 16, 357-366.	2.0	13
38	An innovative micro-diamagnetic levitation system with coils applied in micro-gyroscope. <i>Microsystem Technologies</i> , 2010, 16, 431-439.	2.0	29
39	Optimization design of an electrostatically suspended microgyroscope. , 2010, , .		0
40	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
41	Electromechanical coupling analysis for MEMS featured by stepped-height structure and concentrated load. <i>Microsystem Technologies</i> , 2009, 15, 621-635.	2.0	5
42	Design and fabrication of an electrostatically suspended microgyroscope using UV-LIGA technology. <i>Microsystem Technologies</i> , 2009, 15, 1885-1896.	2.0	9
43	The development of micro-gyroscope technology. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 113001.	2.6	163
44	Single-neuron spinning control system for a non-silicon micromachined rotational gyro. , 2009, , .		1
45	Numerical simulation of flapping-wing insect hovering flight at unsteady flow. <i>International Journal for Numerical Methods in Fluids</i> , 2007, 53, 1801-1817.	1.6	9
46	The study of an electromagnetic levitating micromotor for application in a rotating gyroscope. <i>Sensors and Actuators A: Physical</i> , 2006, 132, 651-657.	4.1	48
47	Electroplated hard magnetic material and its application in microelectromechanical systems. <i>IEEE Transactions on Magnetics</i> , 2005, 41, 4380-4383.	2.1	10
48	A novel safety device with metal counter meshing gears discriminator directly driven by axial flux permanent magnet micromotors based on MEMS technology. <i>Journal of Micromechanics and Microengineering</i> , 2005, 15, 1601-1606.	2.6	11