

Weishan Chen

List of Publications by Citations

Source: <https://exaly.com/author-pdf/3004255/weishan-chen-publications-by-citations.pdf>

Version: 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

100
papers

1,606
citations

22
h-index

37
g-index

119
ext. papers

2,027
ext. citations

4.2
avg, IF

5.28
L-index

#	Paper	IF	Citations
100	A Two-DOF Ultrasonic Motor Using a Longitudinal Bending Hybrid Sandwich Transducer. <i>IEEE Transactions on Industrial Electronics</i> , 2019 , 66, 3041-3050	8.9	118
99	Design and Experiments of a Single-Foot Linear Piezoelectric Actuator Operated in a Stepping Mode. <i>IEEE Transactions on Industrial Electronics</i> , 2018 , 65, 8063-8071	8.9	96
98	Development of a Nonresonant Piezoelectric Motor With Nanometer Resolution Driving Ability. <i>IEEE/ASME Transactions on Mechatronics</i> , 2018 , 23, 444-451	5.5	95
97	Standing wave bi-directional linearly moving ultrasonic motor. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 1998 , 45, 1133-9	3.2	88
96	. <i>IEEE Transactions on Industrial Electronics</i> , 2016 , 63, 1676-1683	8.9	82
95	A Rotary Piezoelectric Actuator Using the Third and Fourth Bending Vibration Modes. <i>IEEE Transactions on Industrial Electronics</i> , 2014 , 61, 4366-4373	8.9	76
94	A review of recent studies on non-resonant piezoelectric actuators. <i>Mechanical Systems and Signal Processing</i> , 2019 , 133, 106254	7.8	66
93	A Frog-Shaped Linear Piezoelectric Actuator Using First-Order Longitudinal Vibration Mode. <i>IEEE Transactions on Industrial Electronics</i> , 2017 , 64, 2188-2195	8.9	51
92	A high-power linear ultrasonic motor using longitudinal vibration transducers with single foot. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2010 , 57, 1860-7	3.2	48
91	. <i>IEEE Access</i> , 2016 , 4, 1109-1116	3.5	44
90	A T-shape linear piezoelectric motor with single foot. <i>Ultrasonics</i> , 2015 , 56, 551-6	3.5	42
89	The design and experiment of a novel ultrasonic motor based on the combination of bending modes. <i>Ultrasonics</i> , 2016 , 71, 205-210	3.5	41
88	A XY Transporting and Nanopositioning Piezoelectric Robot Operated by Leg Rowing Mechanism. <i>IEEE/ASME Transactions on Mechatronics</i> , 2019 , 24, 207-217	5.5	39
87	A review on piezoelectric ultrasonic motors for the past decade: Classification, operating principle, performance, and future work perspectives. <i>Sensors and Actuators A: Physical</i> , 2020 , 306, 111971	3.9	37
86	A new traveling wave ultrasonic motor using thick ring stator with nested PZT excitation. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2010 , 57, 1160-1168	3.2	34
85	Sandwich-Type Multi-Degree-of-Freedom Ultrasonic Motor With Hybrid Excitation. <i>IEEE Access</i> , 2016 , 4, 905-913	3.5	32
84	A cylindrical traveling wave ultrasonic motor using bonded-type composite beam. <i>Ultrasonics</i> , 2016 , 65, 277-81	3.5	29

83	A ring-type multi-DOF ultrasonic motor with four feet driving consistently. <i>Ultrasonics</i> , 2017 , 76, 234-244	3.5	25
82	Developments of a piezoelectric actuator with nano-positioning ability operated in bending modes. <i>Ceramics International</i> , 2017 , 43, S21-S26	5.1	23
81	An electromechanical coupling model of a bending vibration type piezoelectric ultrasonic transducer. <i>Ultrasonics</i> , 2016 , 66, 18-26	3.5	22
80	An electromechanical coupling model of a longitudinal vibration type piezoelectric ultrasonic transducer. <i>Ceramics International</i> , 2015 , 41, S638-S644	5.1	22
79	A Linear Ultrasonic Motor Using Bending Vibration Transducer with Double Driving Feet. <i>Ferroelectrics</i> , 2010 , 400, 221-230	0.6	22
78	Arthropod-Metamerism-Inspired Resonant Piezoelectric Millirobot. <i>Advanced Intelligent Systems</i> , 2021 , 3, 2100015	6	22
77	A Trace Redundant Lubrication Piezoelectric Microjet for Bearing System. <i>IEEE/ASME Transactions on Mechatronics</i> , 2018 , 23, 2263-2272	5.5	21
76	Development of a Four-Feet Driving Type Linear Piezoelectric Actuator Using Bolt-Clamped Transducers. <i>IEEE Access</i> , 2017 , 5, 27162-27171	3.5	20
75	A Cylindrical Traveling Wave Ultrasonic Motor Using Longitudinal Vibration Transducers. <i>Ferroelectrics</i> , 2010 , 409, 117-127	0.6	20
74	Development of a bi-directional standing wave linear piezoelectric actuator with four driving feet. <i>Ultrasonics</i> , 2018 , 84, 81-86	3.5	20
73	Development of a novel spherical stator multi-DOF ultrasonic motor using in-plane non-axisymmetric mode. <i>Mechanical Systems and Signal Processing</i> , 2020 , 140, 106658	7.8	19
72	A Square-type rotary ultrasonic motor using longitudinal modes. <i>Journal of Electroceramics</i> , 2014 , 33, 69-74	1.5	18
71	Temperature self-sensing and closed-loop position control of twisted and coiled actuator. <i>Sensors and Actuators A: Physical</i> , 2019 , 285, 319-328	3.9	17
70	Novel 2-DOF Planar Ultrasonic Motor With Characteristic of Variable Mode Excitation. <i>IEEE Transactions on Industrial Electronics</i> , 2016 , 63, 6941-6948	8.9	14
69	Modeling and experimental evaluations of a four-legged stepper rotary precision piezoelectric stage. <i>Mechanical Systems and Signal Processing</i> , 2019 , 132, 153-167	7.8	14
68	Numerical Study on Hydrodynamic Performance of Bionic Caudal Fin. <i>Applied Sciences (Switzerland)</i> , 2016 , 6, 15	2.6	14
67	Finite element and analytical models for twisted and coiled actuator. <i>Materials Research Express</i> , 2018 , 5, 015701	1.7	14
66	Research on the thermal characteristics of bending hybrid piezoelectric actuators under different exciting methods. <i>Ceramics International</i> , 2017 , 43, S15-S20	5.1	13

65	A sandwich piezoelectric actuator with long stroke and nanometer resolution by the hybrid of two actuation modes. <i>Sensors and Actuators A: Physical</i> , 2019 , 296, 121-131	3.9	11
64	A rotary piezoelectric actuator using longitudinal and bending hybrid transducer. <i>AIP Advances</i> , 2012 , 2, 042136	1.5	11
63	Research on a Linear Piezoelectric Actuator Using T-Shape Transducer to Realize High Mechanical Output. <i>Applied Sciences (Switzerland)</i> , 2016 , 6, 103	2.6	11
62	Motion Planning of a Stepping-Wriggle Type Piezoelectric Actuator Operating in Bending Modes. <i>IEEE Access</i> , 2016 , 4, 2371-2378	3.5	10
61	A Bonded-Type Linear Piezoelectric Motor with Four Feet. <i>Ferroelectrics</i> , 2014 , 459, 91-98	0.6	10
60	An experiment study on temperature characteristics of a linear ultrasonic motor using longitudinal transducers. <i>Ultrasonics</i> , 2019 , 95, 6-12	3.5	9
59	. <i>IEEE Access</i> , 2019 , 7, 43884-43894	3.5	9
58	Study on the Hydrodynamic Performance of Typical Underwater Bionic Foils with Spanwise Flexibility. <i>Applied Sciences (Switzerland)</i> , 2017 , 7, 1120	2.6	9
57	A Novel L-B Hybrid Langevin Transducer Type Linear Ultrasonic Motor With Modal Coupling Reducing Configuration. <i>Ferroelectrics</i> , 2010 , 408, 71-77	0.6	9
56	A Novel Bearing Lubricating Device Based on the Piezoelectric Micro-Jet. <i>Applied Sciences (Switzerland)</i> , 2016 , 6, 38	2.6	9
55	Design and Experimental Research on a Deep-Sea Resonant Linear Ultrasonic Motor. <i>IEEE Access</i> , 2018 , 6, 57249-57256	3.5	9
54	Development of a novel two-DOF piezo-driven fast steering mirror with high stiffness and good decoupling characteristic. <i>Mechanical Systems and Signal Processing</i> , 2021 , 159, 107851	7.8	9
53	Single-phase drive bending-bending piezoelectric actuator operated under 8-shaped trajectory vibration: Concept, computation and experiment evaluation. <i>Mechanical Systems and Signal Processing</i> , 2020 , 139, 106637	7.8	8
52	An Easily Fabricated Linear Piezoelectric Actuator Using Sandwich Longitudinal Vibrators With Four Driving Feet. <i>IEEE Access</i> , 2019 , 7, 4506-4515	3.5	7
51	A Novel Well Drill Assisted with High-Frequency Vibration Using the Bending Mode. <i>Sensors</i> , 2018 , 18,	3.8	7
50	Development and experiment evaluation of an H-shape linear piezoelectric actuator operated in stepping mode. <i>Ceramics International</i> , 2018 , 44, S246-S249	5.1	7
49	A High Power Linear Ultrasonic Motor Using a Bending Bolt-Clamped Transducer. <i>Ferroelectrics</i> , 2013 , 445, 39-50	0.6	7
48	System and Experimental Research on Biomimetic Robot Fish 2007 ,		6

47	Modular design and realization of a torpedo-shape robot fish 2008 ,		5
46	Ultrasonic linear motor using the L-B mode Langevin transducer with an exponential horn. <i>Frontiers of Mechanical Engineering in China</i> , 2008 , 3, 212-217		4
45	Bioinspired Multilegged Piezoelectric Robot: The Design Philosophy Aiming at High-Performance Micromanipulation. <i>Advanced Intelligent Systems</i> , 2100142	6	4
44	Improvement and miniaturization of a T-shaped linear piezoelectric actuator with single foot. <i>Ferroelectrics</i> , 2016 , 493, 1-11	0.6	4
43	Study on the Performance of a Designed Annular Piezoelectric Microjet for Active Lubrication of Space Bearing. <i>IEEE Transactions on Industrial Electronics</i> , 2021 , 1-1	8.9	4
42	A 3-DOF sandwich piezoelectric manipulator with low hysteresis effect: Design, modeling and experimental evaluation. <i>Mechanical Systems and Signal Processing</i> , 2021 , 158, 107768	7.8	4
41	Research on a Novel Exciting Method for a Sandwich Transducer Operating in Longitudinal-Bending Hybrid Modes. <i>Sensors</i> , 2017 , 17,	3.8	3
40	A new rotary ultrasonic motor using longitudinal vibration transducers. <i>Advances in Mechanical Engineering</i> , 2015 , 7, 168781401558742	1.2	3
39	A new traveling wave ultrasonic motor using thick ring stator with nested PZT excitation. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2010 , 57, 1160-8	3.2	3
38	The Effects of Parameters on the Stability of Passive Dynamic Walking 2009 ,		3
37	Design and fabrication of a linear ultrasonic motor using push-pull type L-B hybrid Langevin transducer with single foot 2008 ,		3
36	A High Speed Ultrasonic Linear Motor Using Longitudinal and Bending Multimode Bolt-Clamped Langevin Type Transducer 2006 ,		3
35	Aerodynamic Drag Analysis of 3-DOF Flex-Gimbal GyroWheel System in the Sense of Ground Test. <i>Sensors</i> , 2016 , 16,	3.8	3
34	A piezoelectric motor operated under the superposition of the second and third bending modes of a sandwich transducer. <i>Ferroelectrics</i> , 2016 , 504, 87-95	0.6	3
33	Numerical simulation of bionic foils in tandem arrangement. <i>Advances in Mechanical Engineering</i> , 2016 , 8, 168781401664929	1.2	3
32	Development of a two-DOF piezoelectric posture alignment mechanism with low coupling based on a cross-orthogonal-axis structure. <i>Smart Materials and Structures</i> , 2021 , 30, 085042	3.4	3
31	Fast and Precise Control for the Vibration Amplitude of an Ultrasonic Transducer Based on Fuzzy PID Control. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2021 , 68, 2766-2774	3.2	3
30	Effects of knurl tooth angle on mechanical and thermal behaviors of aluminum ultrasonic welding. <i>Ultrasonics</i> , 2020 , 108, 106207	3.5	2

29	Pseudo-Full-Bridge Inverter With Soft-Switching Capability for a Quarter-Phase Ultrasonic Motor. <i>IEEE Transactions on Industrial Electronics</i> , 2019 , 66, 4199-4208	8.9	2
28	Simulation Study on the Body Side-Sway Characteristic for Rigid Robot Fish 2008 ,		2
27	Robust Deep Softmax Regression Against Label Noise for Unsupervised Domain Adaptation. <i>International Journal of Pattern Recognition and Artificial Intelligence</i> , 2019 , 33, 1940002	1.1	2
26	Research on the Acoustic-Structure Coupling Characteristics of a Piezoelectric Micro-Jet Used for Lubricating. <i>IEEE Access</i> , 2018 , 6, 72691-72697	3.5	2
25	A Compact Ultrasonic Burnishing System for High Precision Planar Burnishing: Design and Performance Evaluation. <i>IEEE Transactions on Industrial Electronics</i> , 2021 , 1-1	8.9	2
24	Development of a Linear Piezoelectric Micro-Actuator inspired by the Hollowing Art. <i>IEEE Transactions on Industrial Electronics</i> , 2022 , 1-1	8.9	2
23	A crossbeam linear ultrasonic motor using bending vibrations 2015 ,		1
22	Numerical studies on hydrodynamics of flapping foils 2015 ,		1
21	Hydrodynamic interactions between two tandem flexible plates in viscous flow 2015 ,		1
20	Unbalance identification for mainshaft system of 2-DOF precision centrifuge: A displacement sensor-based approach 2015 ,		1
19	Operating principle and vibration characteristic of an I-shaped ultrasonic motor 2015 ,		1
18	A novel traveling wave ultrasonic motor using sandwich-type ring stator 2014 ,		1
17	Shape Selection on the Flow Drag Characteristic Passing a Streamline Fishlike Body 2009 ,		1
16	Design and analysis of a double rings type ultrasonic motor using longitudinal transducers 2009 ,		1
15	Using biological spring to improve propulsive efficiency for fishlike robot 2008 ,		1
14	Restraining the Backward Motion of a Piezoelectric Stick-Slip Actuator with a Passive Damping Foot. <i>IEEE Transactions on Industrial Electronics</i> , 2021 , 1-1	8.9	1
13	Study on improving the resolution of an H-shaped piezoelectric ultrasonic actuator by stick-slip principle. <i>Smart Materials and Structures</i> ,	3.4	1
12	ADAMS-based vibration analysis of GyroWheel rotor with flex-gimbal suspension 2016 ,		1

11	Vibration analysis of flex-gimbal system with high spinning velocity 2016 ,		1
10	Developments of piezoelectric ultrasonic actuators operating under bending hybrid vibration modes. <i>Mechanics of Advanced Materials and Structures</i> , 2019 , 26, 416-423	1.8	1
9	Designing and Modeling of Tightly Wrapped Twisted Artificial Muscles with Large Stroke and Low Hysteresis. <i>IEEE Transactions on Industrial Electronics</i> , 2022 , 1-1	8.9	1
8	Development of a high-precision piezoelectric ultrasonic milling tool using longitudinal-bending hybrid transducer. <i>International Journal of Mechanical Sciences</i> , 2022 , 222, 107239	5.5	1
7	Research on the spreading characteristics of biodegradable ethyl cyanoacrylate droplet of a piezoelectric inkjet. <i>Sensors and Actuators A: Physical</i> , 2020 , 302, 111810	3.9	0
6	Design philosophy for ultrasonic motors using the bending hybrid modes. <i>Sensors and Actuators A: Physical</i> , 2021 , 331, 113029	3.9	0
5	Sensorless Unbalance Diagnosis of Affiliated Rotating Chamber Based on Driving Current of Permanent Magnet Synchronous Motor. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021 , 1-1	5.5	0
4	Development of a cross-scale 2-DOF piezoelectric rotary platform based on active friction switching. <i>International Journal of Mechanical Sciences</i> , 2022 , 220, 107165	5.5	0
3	Step consistency active control method for inertial piezoelectric actuator using embedded strain gauges.. <i>Review of Scientific Instruments</i> , 2021 , 92, 125005	1.7	0
2	Analytical Model of a Special Percussive Mechanism for Planetary Exploration and Feature Analysis. <i>Journal of Aerospace Engineering</i> , 2018 , 31, 04017101	1.4	
1	Radial disturbance compensation device of cylindrical cantilever beam using embedded piezoelectric ceramics with bending mode. <i>Mechanical Systems and Signal Processing</i> , 2022 , 172, 109009 ^{7.8}		