

# Fujun Wang

## List of Publications by Year in descending order

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67  
papers

1,552  
citations

331642

21  
h-index

315719

38  
g-index

67  
all docs

67  
docs citations

67  
times ranked

864  
citing authors

#	ARTICLE	IF	CITATIONS
1	A novel friction-actuated 2-DOF high precision positioning stage with hybrid decoupling structure. Mechanism and Machine Theory, 2022, 167, 104511.	4.5	20
2	Design of a rhombus-type stick-slip actuator with two driving modes for micropositioning. Mechanical Systems and Signal Processing, 2022, 166, 108421.	8.0	22
3	Design and Control of a Spatial Micromanipulator Inspired by Deployable Structure. IEEE Transactions on Industrial Electronics, 2022, 69, 971-979.	7.9	22
4	A Dual-Driven High Precision Rotary Platform Based on Stick-Slip Principle. IEEE/ASME Transactions on Mechatronics, 2022, 27, 3053-3064.	5.8	17
5	Modeling and Analysis of Soft Pneumatic Network Bending Actuators. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2195-2203.	5.8	33
6	Adhesion performance study of a novel microstructured stamp for micro-transfer printing. Soft Matter, 2021, 17, 4989-4997.	2.7	4
7	Precision tracking of a 2-DOF stick-slip positioner using modeling-free inversion-based iterative control and modified inverse hysteresis compensator. Sensors and Actuators A: Physical, 2021, 331, 112959.	4.1	11
8	A shear force assisted tiny object releasing method of a 2-DOF microgripper. , 2021, , .		0
9	A 2-DOF Monolithic Compliant Rotation Platform Driven by Piezoelectric Actuators. IEEE Transactions on Industrial Electronics, 2020, 67, 6963-6974.	7.9	54
10	A Two-Finger Soft-Robotic Gripper with Enveloping and Pinching Grasping Modes. IEEE/ASME Transactions on Mechatronics, 2020, , 1-1.	5.8	29
11	Wettability modification of zirconia by laser surface texturing and silanization. International Journal of Applied Ceramic Technology, 2020, 17, 2182-2192.	2.1	20
12	A Spatial Deployable Three-DOF Compliant Nano-Positioner With a Three-Stage Motion Amplification Mechanism. IEEE/ASME Transactions on Mechatronics, 2020, 25, 1322-1334.	5.8	47
13	Pull-off force modeling and experimental study of PDMS stamp considering preload in micro transfer printing. International Journal of Solids and Structures, 2020, 193-194, 134-140.	2.7	11
14	Modeling and control methodology for an XYZ micro manipulator. Review of Scientific Instruments, 2019, 90, .	1.3	6
15	Design of a flexure-based mechanism possessing low stiffness and constant force. Review of Scientific Instruments, 2019, 90, .	1.3	14
16	Fabrication of controllable wettability of crystalline silicon surfaces by laser surface texturing and silanization. Applied Surface Science, 2019, 497, 143805.	6.1	22
17	A unified element stiffness matrix model for variable cross-section flexure hinges in compliant mechanisms for micro/nano positioning. Microsystem Technologies, 2019, 25, 4257-4268.	2.0	4
18	A Novel Soft-Robotic Gripper with Vertically Plane Contact of the Object. , 2019, , .		4

#	ARTICLE	IF	CITATIONS
19	Design, Modeling and Analysis of a Novel Piezoactuated XYZ Compliant Mechanism for Large Workspace Nano-positioning. , 2019, , .		0
20	A Novel XY Nano Positioning Stage with a Three Stage Motion Amplification Mechanism. , 2019, , .		1
21	Smooth Displacement/Force Switching Control of a Piezoelectric Actuated Microgripper for Micro Manipulation. , 2019, , .		2
22	Design and Modeling of a Decoupled 2-DOF Stick-slip Positioning Stage. , 2019, , .		5
23	A Novel Actuator-Internal Micro/Nano Positioning Stage With an Arch-Shape Bridge-Type Amplifier. IEEE Transactions on Industrial Electronics, 2019, 66, 9161-9172.	7.9	82
24	Design of a Novel Dual-Axis Micromanipulator With an Asymmetric Compliant Structure. IEEE/ASME Transactions on Mechatronics, 2019, 24, 656-665.	5.8	64
25	Surface topography modeling and roughness extraction in helical milling operation. International Journal of Advanced Manufacturing Technology, 2018, 95, 4561-4571.	3.0	11
26	Design and characteristic analysis of an aerostatic decoupling table for microelectronic packaging. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2018, 232, 1079-1090.	2.1	9
27	Modeling and controller design of a 6-DOF precision positioning system. Mechanical Systems and Signal Processing, 2018, 104, 536-555.	8.0	75
28	Design and control of a novel asymmetrical piezoelectric actuated microgripper for micromanipulation. Sensors and Actuators A: Physical, 2018, 269, 227-237.	4.1	93
29	Characteristics of a Decoupled 2-Dof Nano-Positioning Stage. , 2018, , .		0
30	A Symmetry Flexure Structure and its Application in Micro/Nano Newton Force Generation. , 2018, , .		0
31	A novel method and system for calibrating the spring constant of atomic force microscope cantilever based on electromagnetic actuation. Review of Scientific Instruments, 2018, 89, 125119.	1.3	4
32	Design and Characteristics of a Novel Compliant Symmetric Microgripper Mechanism. , 2018, , .		4
33	Design of A Novel Piezoelectric Actuated Two-Degree-of-freedom Compliant Stage. , 2018, , .		0
34	A Novel Archimedes Planar Springs Flexure Structure for Microforce Actuator. , 2018, , .		0
35	Structure design and experimental investigation of a multi-function stylus profiling system for characterization of engineering surfaces at micro/nano scales. Microsystem Technologies, 2018, 24, 2177-2187.	2.0	6
36	Modeling and tracking control of a novel XYẏz stage. Microsystem Technologies, 2017, 23, 3575-3588.	2.0	11

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37	A runout measuring method using modeling and simulation cutting force in micro end-milling. International Journal of Advanced Manufacturing Technology, 2017, 91, 4191-4201.	3.0	34
38	Grasping force hysteresis compensation of a piezoelectric-actuated wire clamp with a modified inverse Prandtl-Ishlinskii model. Review of Scientific Instruments, 2017, 88, 115101.	1.3	21
39	Low-cost and fast fabrication of the ultrasonic embossing on polyethylene terephthalate (PET) films using laser processed molds. Microsystem Technologies, 2017, 23, 5653-5668.	2.0	15
40	Design and control of a 6-degree-of-freedom precision positioning system. Robotics and Computer-Integrated Manufacturing, 2017, 44, 77-96.	9.9	68
41	Probe system design for three dimensional micro/nano scratching machine. Microsystem Technologies, 2017, 23, 2285-2295.	2.0	9
42	Development of a high speed and precision wire clamp with both position and force regulations. Robotics and Computer-Integrated Manufacturing, 2017, 44, 208-217.	9.9	35
43	Modeling and analyses of helical milling process. International Journal of Advanced Manufacturing Technology, 2017, 90, 1003-1022.	3.0	20
44	A novel electromagnetic force method for micro/nano newton force measurement. , 2017, , .		1
45	Design and modeling of a 2-DOF decoupled rotation platform for micro-manipulation. , 2017, , .		1
46	Lithography-induced wettability changes of silicon. , 2017, , .		2
47	Development of a novel 3-DOF suspension mechanism for multi-function stylus profiling systems. International Journal of Precision Engineering and Manufacturing, 2016, 17, 1415-1423.	2.2	7
48	Design of a novel asymmetrical piezoelectric actuated microgripper for micromanipulation. , 2016, , .		2
49	A general torsional stiffness estimating approach for geared transmission employed in rotary table of machine tools. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2016, 10, JAMDSM0024-JAMDSM0024.	0.7	2
50	Study on torsional stiffness of transmission employed in a rotary table. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2016, 230, 3541-3555.	2.1	2
51	Design and Control of a Compliant Microgripper With a Large Amplification Ratio for High-Speed Micro Manipulation. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1262-1271.	5.8	140
52	A Flexure-Based Kinematically Decoupled Micropositioning Stage With a Centimeter Range Dedicated to Micro/Nano Manufacturing. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1055-1062.	5.8	49
53	Development of a piezo-driven 3-DOF stage with T-shape flexible hinge mechanism. Robotics and Computer-Integrated Manufacturing, 2016, 37, 125-138.	9.9	82
54	A new method for nondestructive quality evaluation of the resistance spot welding based on the radar chart method and the decision tree classifier. International Journal of Advanced Manufacturing Technology, 2015, 78, 841-851.	3.0	44

#	ARTICLE	IF	CITATIONS
55	Dynamic modeling and control of a novel XY positioning stage for semiconductor packaging. Transactions of the Institute of Measurement and Control, 2015, 37, 177-189.	1.7	20
56	Design, modelling and characterization of a 2-DOF precision positioning platform. Transactions of the Institute of Measurement and Control, 2015, 37, 396-405.	1.7	14
57	A novel monolithic piezoelectric actuated flexure-mechanism based wire clamp for microelectronic device packaging. Review of Scientific Instruments, 2015, 86, 045106.	1.3	55
58	Design of a Piezoelectric-Actuated Microgripper With a Three-Stage Flexure-Based Amplification. IEEE/ASME Transactions on Mechatronics, 2015, 20, 2205-2213.	5.8	140
59	A novel voice coil motor-driven compliant micropositioning stage based on flexure mechanism. Review of Scientific Instruments, 2015, 86, 095001.	1.3	66
60	Dynamic analysis of an XY positioning table. , 2013, , .		5
61	An Improved Algorithm for Calculating Friction Force and Torque in Involute Helical Gears. Mathematical Problems in Engineering, 2013, 2013, 1-13.	1.1	5
62	Transverse vibration analyses of cantilevered boron nitride nanocones. Micro and Nano Letters, 2013, 8, 899-902.	1.3	1
63	Dynamic modeling and dynamic characteristic analysis of bonding wire. , 2011, , .		0
64	Model-based dynamic characteristics investigation of ultrasonic transducers for MEMS packaging. , 2008, , .		1
65	Design methodology of high frequency ultrasonic transducer for wire bonding. , 2008, , .		1
66	The Design of New Ultrasonic Transducers for Wire bonding Devices. , 2007, , .		1
67	The Structure Design and Control of Precision Positioning System Driven by Rotary VCA. , 2007, , .		2