

Dawei Zhang

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/1911503/dawei-zhang-publications-by-year.pdf>

Version: 2024-04-19

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.

98
papers

1,603
citations

20
h-index

37
g-index

126
ext. papers

1,981
ext. citations

3.1
avg, IF

4.97
L-index

#	Paper	IF	Citations
98	A Dual-Driven High Precision Rotary Platform Based on Stick-Slip Principle. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021 , 1-12	5.5	2
97	Modeling and Analysis of Soft Pneumatic Network Bending Actuators. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021 , 26, 2195-2203	5.5	9
96	Thermal simulation speculation-based active coolant control onto spindle bearings. <i>International Journal of Advanced Manufacturing Technology</i> , 2021 , 113, 337-350	3.2	1
95	Adhesion performance study of a novel microstructured stamp for micro-transfer printing. <i>Soft Matter</i> , 2021 , 17, 4989-4997	3.6	1
94	Dodecyl Mercaptan Functionalized Copper Mesh for Water Repellence and Oil-water Separation. <i>Journal of Bionic Engineering</i> , 2021 , 18, 887-899	2.7	0
93	Temperature detection based transient load/boundary condition calculations for spindle thermal simulation. <i>International Journal of Advanced Manufacturing Technology</i> , 2020 , 108, 35-46	3.2	1
92	A Two-Finger Soft-Robotic Gripper With Enveloping and Pinching Grasping Modes. <i>IEEE/ASME Transactions on Mechatronics</i> , 2020 , 1-1	5.5	10
91	ANTI-WEAR PERFORMANCE OF POLISHED MICROCRYSTALLINE DIAMOND FILMS SLIDING AGAINST Si3N4 UNDER WATER LUBRICATION. <i>Surface Review and Letters</i> , 2020 , 27, 2050008	1.1	1
90	An XYZ micromanipulator for precise positioning applications. <i>Journal of Micro-Bio Robotics</i> , 2020 , 16, 53-63	1.4	6
89	Body diagonal error measurement and evaluation of a multiaxis machine tool using a multibeam laser interferometer. <i>International Journal of Advanced Manufacturing Technology</i> , 2020 , 107, 4545-4559	3.2	2
88	Stiffness matching method for the ball screw feed drive system of machine tools. <i>Journal of Mechanical Science and Technology</i> , 2020 , 34, 2985-2995	1.6	3
87	A Contrastive Investigation on the Anticorrosive Performance of Stearic Acid and Fluoroalkylsilane-Modified Superhydrophobic Surface in Salt, Alkali, and Acid Solution. <i>Langmuir</i> , 2020 , 36, 10279-10292	4	13
86	Antlion Optimized Robust Control Approach for Micropositioning Trajectory Tracking Tasks. <i>IEEE Access</i> , 2020 , 8, 220889-220907	3.5	4
85	A 2-DOF Monolithic Compliant Rotation Platform Driven by Piezoelectric Actuators. <i>IEEE Transactions on Industrial Electronics</i> , 2020 , 67, 6963-6974	8.9	28
84	A unified element stiffness matrix model for variable cross-section flexure hinges in compliant mechanisms for micro/nano positioning. <i>Microsystem Technologies</i> , 2019 , 25, 4257-4268	1.7	3
83	Modeling and control methodology for an XYZ micro manipulator. <i>Review of Scientific Instruments</i> , 2019 , 90, 105007	1.7	5
82	Design of a flexure-based mechanism possessing low stiffness and constant force. <i>Review of Scientific Instruments</i> , 2019 , 90, 105005	1.7	7

81	Design of a novel parallel monolithic 3-DOF compliant micromanipulator 2019 ,		5
80	A Novel Soft-Robotic Gripper with Vertically Plane Contact of the Object 2019 ,		1
79	Investigation of Effects of Acid, Alkali, and Salt Solutions on Fluorinated Superhydrophobic Surfaces. <i>Langmuir</i> , 2019 , 35, 17027-17036	4	17
78	A Novel XY Nano Positioning Stage with a Three Stage Motion Amplification Mechanism 2019 ,		1
77	Smooth Displacement/Force Switching Control of a Piezoelectric Actuated Micrograsper for Micro Manipulation 2019 ,		1
76	Design and Modeling of a Decoupled 2-DOF Stick-slip Positioning Stage 2019 ,		4
75	Development and control methodologies for 2-DOF micro/nano positioning stage with high out-of-plane payload capacity. <i>Robotics and Computer-Integrated Manufacturing</i> , 2019 , 56, 95-105	9.2	22
74	Fabrication of hierarchical freeform surfaces by 2D compliant vibration-assisted cutting. <i>International Journal of Mechanical Sciences</i> , 2019 , 152, 454-464	5.5	23
73	Chatter detection based on wavelet coherence functions in micro-end-milling processes. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2019 , 233, 1934-1945	2.4	11
72	Dynamic milling stability of thin-walled component considering time variation of coupling deflection and dynamic characteristics of tool-workpiece system. <i>International Journal of Advanced Manufacturing Technology</i> , 2018 , 94, 3005-3016	3.2	3
71	Design of a XYZ scanner for home-made high-speed atomic force microscopy. <i>Microsystem Technologies</i> , 2018 , 24, 3123-3132	1.7	11
70	Design and characteristic analysis of an aerostatic decoupling table for microelectronic packaging. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2018 , 232, 1079-1090	1.3	5
69	Active and intelligent control onto thermal behaviors of a motorized spindle unit. <i>International Journal of Advanced Manufacturing Technology</i> , 2018 , 98, 3133-3146	3.2	3
68	Influence of external heat sources on volumetric thermal errors of precision machine tools. <i>International Journal of Advanced Manufacturing Technology</i> , 2018 , 99, 475-495	3.2	7
67	Effects of geometrical errors of guideways on the repeatability of positioning of linear axes of machine tools. <i>International Journal of Advanced Manufacturing Technology</i> , 2018 , 98, 2319-2333	3.2	17
66	Structure design and experimental investigation of a multi-function stylus profiling system for characterization of engineering surfaces at micro/nano scales. <i>Microsystem Technologies</i> , 2018 , 24, 2177-2187	1.7	4
65	An experimental study on the rotational accuracy of variable preload spindle-bearing system. <i>Advances in Mechanical Engineering</i> , 2018 , 10, 168781401877617	1.2	4
64	Modeling and controller design of a 6-DOF precision positioning system. <i>Mechanical Systems and Signal Processing</i> , 2018 , 104, 536-555	7.8	54

63	Design and control of a novel asymmetrical piezoelectric actuated microgripper for micromanipulation. <i>Sensors and Actuators A: Physical</i> , 2018 , 269, 227-237	3.9	60
62	Surface roughness modeling in micro end-milling. <i>International Journal of Advanced Manufacturing Technology</i> , 2018 , 95, 1655-1664	3.2	15
61	Influences of linear and angular compensation on volumetric accuracy of precision machine tools 2018 ,		2
60	A novel method and system for calibrating the spring constant of atomic force microscope cantilever based on electromagnetic actuation. <i>Review of Scientific Instruments</i> , 2018 , 89, 125119	1.7	3
59	Design and Characteristics of a Novel Compliant Symmetric Microgripper Mechanism 2018 ,		4
58	Modeling and tracking control of a novel XY \bar{z} stage. <i>Microsystem Technologies</i> , 2017 , 23, 3575-3588	1.7	9
57	Simulation and analysis for accuracy predication and adjustment for machine tool assembly process. <i>Advances in Mechanical Engineering</i> , 2017 , 9, 168781401773447	1.2	8
56	Grasping force hysteresis compensation of a piezoelectric-actuated wire clamp with a modified inverse Prandtl-Ishlinskii model. <i>Review of Scientific Instruments</i> , 2017 , 88, 115101	1.7	20
55	Low-cost and fast fabrication of the ultrasonic embossing on polyethylene terephthalate (PET) films using laser processed molds. <i>Microsystem Technologies</i> , 2017 , 23, 5653-5668	1.7	10
54	Hierarchical error model to estimate motion error of linear motion bearing table. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 93, 1915-1927	3.2	20
53	An investigation of surface roughness in micro-end-milling of metals. <i>Australian Journal of Mechanical Engineering</i> , 2017 , 15, 166-174	1	6
52	Design and control of a 6-degree-of-freedom precision positioning system. <i>Robotics and Computer-Integrated Manufacturing</i> , 2017 , 44, 77-96	9.2	45
51	Probe system design for three dimensional micro/nano scratching machine. <i>Microsystem Technologies</i> , 2017 , 23, 2285-2295	1.7	6
50	Development of a high speed and precision wire clamp with both position and force regulations. <i>Robotics and Computer-Integrated Manufacturing</i> , 2017 , 44, 208-217	9.2	29
49	A CAD/CAE-integrated structural design framework for machine tools. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 91, 545-568	3.2	15
48	Modeling and analyses of helical milling process. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 90, 1003-1022	3.2	16
47	Inverse Kinematics of a 7R 6-DOF Robot with Nonspherical Wrist Based on Transformation into the 6R Robot. <i>Mathematical Problems in Engineering</i> , 2017 , 2017, 1-12	1.1	3
46	A novel multi-probe method for separating spindle radial error from artifact roundness error. <i>International Journal of Advanced Manufacturing Technology</i> , 2017 , 93, 623-634	3.2	21

45	Design and Control of a Compliant Microgripper With a Large Amplification Ratio for High-Speed Micro Manipulation. <i>IEEE/ASME Transactions on Mechatronics</i> , 2016 , 21, 1262-1271	5.5	108
44	A Flexure-Based Kinematically Decoupled Micropositioning Stage With a Centimeter Range Dedicated to Micro/Nano Manufacturing. <i>IEEE/ASME Transactions on Mechatronics</i> , 2016 , 21, 1055-1062	5.5	38
43	A new top-down design method for the stiffness of precision machine tools. <i>International Journal of Advanced Manufacturing Technology</i> , 2016 , 83, 1887-1904	3.2	17
42	Prediction of Dynamic Milling Stability considering Time Variation of Deflection and Dynamic Characteristics in Thin-Walled Component Milling Process. <i>Shock and Vibration</i> , 2016 , 2016, 1-14	1.1	2
41	Development of a novel 3-DOF suspension mechanism for multi-function stylus profiling systems. <i>International Journal of Precision Engineering and Manufacturing</i> , 2016 , 17, 1415-1423	1.7	5
40	Design of a novel asymmetrical piezoelectric actuated microgripper for micromanipulation 2016 ,		1
39	A new method for measuring the rotational accuracy of rolling element bearings. <i>Review of Scientific Instruments</i> , 2016 , 87, 125102	1.7	3
38	Laser-induced changes in titanium by femtosecond, picosecond and millisecond laser ablation. <i>Radiation Effects and Defects in Solids</i> , 2015 , 170, 528-540	0.9	6
37	A novel monolithic piezoelectric actuated flexure-mechanism based wire clamp for microelectronic device packaging. <i>Review of Scientific Instruments</i> , 2015 , 86, 045106	1.7	44
36	Thermal simulation modeling of a hydrostatic machine feed platform. <i>International Journal of Advanced Manufacturing Technology</i> , 2015 , 79, 1581-1595	3.2	7
35	Novel real function based method to construct heterogeneous porous scaffolds and additive manufacturing for use in medical engineering. <i>Medical Engineering and Physics</i> , 2015 , 37, 1037-46	2.4	46
34	Design of a Piezoelectric-Actuated Microgripper With a Three-Stage Flexure-Based Amplification. <i>IEEE/ASME Transactions on Mechatronics</i> , 2015 , 20, 2205-2213	5.5	114
33	Fabrication of polymer electronic boards by ultrasonic embossing and welding. <i>Microsystem Technologies</i> , 2015 , 21, 365-369	1.7	1
32	Laser-induced hydrophobicity on Ti-6Al-4V surface 2015 ,		3
31	Fabrication of polymer optical diffusers by buffer-assisted ultrasonic embossing 2015 ,		2
30	Dynamic modeling and control of a novel XY positioning stage for semiconductor packaging. <i>Transactions of the Institute of Measurement and Control</i> , 2015 , 37, 177-189	1.8	16
29	Design, modelling and characterization of a 2-DOF precision positioning platform. <i>Transactions of the Institute of Measurement and Control</i> , 2015 , 37, 396-405	1.8	11
28	Experimental Investigation of Robust Motion Tracking Control for a 2-DOF Flexure-Based Mechanism. <i>IEEE/ASME Transactions on Mechatronics</i> , 2014 , 19, 1737-1745	5.5	56

27	Multi-morphology transition hybridization CAD design of minimal surface porous structures for use in tissue engineering. <i>CAD Computer Aided Design</i> , 2014 , 56, 11-21	2.9	74
26	Design and Computational Optimization of a Decoupled 2-DOF Monolithic Mechanism. <i>IEEE/ASME Transactions on Mechatronics</i> , 2014 , 19, 872-881	5.5	93
25	Development and Application of Molded Interconnect Devices. <i>International Journal of Robotics Applications and Technologies</i> , 2014 , 2, 1-18		
24	Machining forces prediction for peripheral milling of low-rigidity component with curved geometry. <i>International Journal of Advanced Manufacturing Technology</i> , 2013 , 64, 1599-1610	3.2	16
23	A Novel Direct Inverse Modeling Approach for Hysteresis Compensation of Piezoelectric Actuator in Feedforward Applications. <i>IEEE/ASME Transactions on Mechatronics</i> , 2013 , 18, 981-989	5.5	156
22	Design issues in a decoupled XY stage: Static and dynamics modeling, hysteresis compensation, and tracking control. <i>Sensors and Actuators A: Physical</i> , 2013 , 194, 95-105	3.9	82
21	Experimental Analysis of Laser Interferometry-Based Robust Motion Tracking Control of a Flexure-Based Mechanism. <i>IEEE Transactions on Automation Science and Engineering</i> , 2013 , 10, 267-275	4.9	39
20	Dynamic analysis of an XY positioning table 2013 ,		4
19	An Improved Algorithm for Calculating Friction Force and Torque in Involute Helical Gears. <i>Mathematical Problems in Engineering</i> , 2013 , 2013, 1-13	1.1	5
18	Transverse vibration analyses of cantilevered boron nitride nanocones. <i>Micro and Nano Letters</i> , 2013 , 8, 899-902	0.9	1
17	Experimental System Identification, Feed-Forward Control, and Hysteresis Compensation of a 2-DOF Mechanism. <i>International Journal of Intelligent Mechatronics and Robotics</i> , 2013 , 3, 1-21		5
16	Rate-dependent hysteresis modeling and compensation of piezo-driven flexure-based mechanism. <i>Transactions of Tianjin University</i> , 2012 , 18, 157-167	2.9	5
15	Thermal error compensation for telescopic spindle of CNC machine tool based on SIEMENS 840D system. <i>Transactions of Tianjin University</i> , 2011 , 17, 340-343	2.9	6
14	The Control System Design of Thermal Experimental Platform for High-Speed Spindle Based PLC 2010 ,		1
13	Dynamic modelling and simulation of electric bicycle ride comfort 2009 ,		5
12	Design and kinematics analysis of a 3-DOF precision positioning stage 2009 ,		1
11	Research on battery to ride comfort of electric bicycle based on multi-body dynamics theory 2009 ,		7
10	Model-based dynamic characteristics investigation of ultrasonic transducers for MEMS packaging 2008 ,		1

9	Stiffness estimation of the flexure-based five-bar micro-manipulator 2008 ,		3
8	Dynamic Design of High Speed Precision Positioning System 2007 ,		1
7	Conceptual Design and Kinematic Performance Evaluation of a New Asymmetrical Parallel Robot 2007 ,		5
6	Design and Kinematics Analysis of Oblique Axis Non-spherical 3R Wrist 2007 ,		1
5	The Structure Design and Control of Precision Positioning System Driven by Rotary VCA 2007 ,		2
4	Conceptual Design and Dimensional Synthesis of a Reconfigurable Hybrid Robot. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2005 , 127, 647-653	3.3	18
3	Stiffness estimation of a parallel kinematic machine. <i>Science in China Series D: Earth Sciences</i> , 2001 , 44, 473-485		3
2	Acoustic absorption performance of polyacrylic composite latex. <i>Journal of Applied Polymer Science</i> , 1995 , 58, 565-569	2.9	3
1	Active coolant control onto thermal behaviors of precision ball screw unit. <i>International Journal of Advanced Manufacturing Technology</i> ,1	3.2	1