

Xian-min Zhang

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/2141936/xian-min-zhang-publications-by-year.pdf>

Version: 2024-04-26

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.

254
papers

3,152
citations

30
h-index

43
g-index

291
ext. papers

4,094
ext. citations

3.1
avg, IF

6.3
L-index

#	Paper	IF	Citations
254	Topology optimization of the front electrode patterns of solar cells based on moving wide Bezier curves with constrained end. <i>Structural and Multidisciplinary Optimization</i> , 2022 , 65, 1	3.6	0
253	A novel one-degree-of-freedom translational partly compliant mechanism with variable motion direction. <i>Mechanism and Machine Theory</i> , 2022 , 171, 104695	4	0
252	Design of compliant mechanisms: An explicit topology optimization method using end-constrained spline curves with variable width. <i>Mechanism and Machine Theory</i> , 2022 , 171, 104713	4	1
251	Hybrid explicit/implicit topology optimization method for the integrated layout design of compliant mechanisms and actuators. <i>Mechanism and Machine Theory</i> , 2022 , 171, 104750	4	1
250	Laser induced forward transfer of high viscosity silver paste on double groove structure. <i>Optics and Laser Technology</i> , 2022 , 148, 107795	4.2	0
249	Analysis and design of spatial compliant mechanisms using a 3-D dynamic stiffness model. <i>Mechanism and Machine Theory</i> , 2022 , 168, 104581	4	4
248	An Approach for Geometrically Nonlinear Topology Optimization Using Moving Wide-Bezier Components With Constrained Ends. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2022 , 144,	3	3
247	Extended Dynamic Stiffness Model for Analyzing Flexure-Hinge Mechanisms With Lumped Compliance. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2022 , 144,	3	2
246	Design and analysis of corrugated flexure-based lamina emergent spatial joints for symmetrical compliant kaleidocycles. <i>Mechanism and Machine Theory</i> , 2022 , 167, 104525	4	4
245	Design of a compliant adjustable constant-force gripper based on circular beams. <i>Mechanism and Machine Theory</i> , 2022 , 173, 104843	4	1
244	A Path Correction Method Based on Global and Local Matching for Robotic Autonomous Systems. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2022 , 104, 1	2.9	
243	A Novel Semi-Supervised Graph-Guided Approach for Intelligent Health State Diagnosis of a 3-PRR Planar Parallel Manipulator. <i>IEEE/ASME Transactions on Mechatronics</i> , 2022 , 1-12	5.5	1
242	Enhancing Dynamic Bandwidth of Amplified Piezoelectric Actuators by a Hybrid Lever and Bridge-Type Compliant Mechanism. <i>Actuators</i> , 2022 , 11, 134	2.4	1
241	Multi-scale Graph-guided Convolutional Network with Node Attention for Intelligent Health State Diagnosis of a 3-PRR Planar Parallel Manipulator. <i>IEEE Transactions on Industrial Electronics</i> , 2021 , 1-1	8.9	2
240	Position/Force Visual-Sensing Based Robotic Sheet-Like Peg-in-Hole Assembly. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021 , 1-1	5.2	0
239	Kinetostatic Modeling of Piezoelectric Displacement Amplifiers Based on Matrix Displacement Method. <i>Lecture Notes in Computer Science</i> , 2021 , 404-414	0.9	
238	Design of Flexure Hinges Using Geometrically Nonlinear Topology Optimization. <i>Lecture Notes in Computer Science</i> , 2021 , 179-189	0.9	

237	ROS-Based Control Implementation of an Soft Gripper with Force Feedback. <i>Lecture Notes in Computer Science</i> , 2021 , 528-538	0.9	0
236	Theoretical Analysis of a Novel Force Sensor Based on Optical Fibers Used for Semicircular Flexure Beam Unit. <i>Lecture Notes in Computer Science</i> , 2021 , 253-262	0.9	
235	Analysis of Gravitational Effects on the Dynamic Behavior of Open Loop Mechanisms with Multiple Clearance Joints. <i>Lecture Notes in Computer Science</i> , 2021 , 390-400	0.9	
234	Modular crawling robots using soft pneumatic actuators. <i>Frontiers of Mechanical Engineering</i> , 2021 , 16, 163-175	3.3	4
233	Fuzzy-PI double-layer stability control of an online vision-based tracking system. <i>Intelligent Service Robotics</i> , 2021 , 14, 187-197	2.6	1
232	A robust edge-based template matching algorithm for displacement measurement of compliant mechanisms under scanning electron microscope. <i>Review of Scientific Instruments</i> , 2021 , 92, 033703	1.7	1
231	A projective transformation-based topology optimization using moving morphable components. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021 , 376, 113646	5.7	5
230	Deep multi-scale adversarial network with attention: A novel domain adaptation method for intelligent fault diagnosis. <i>Journal of Manufacturing Systems</i> , 2021 , 59, 565-576	9.1	17
229	A robust construction of normalized CNN for online intelligent condition monitoring of rolling bearings considering variable working conditions and sources. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021 , 174, 108973	4.6	5
228	Design of dielectric elastomer grippers using Bezier curves. <i>Mechanism and Machine Theory</i> , 2021 , 158, 104216	4	5
227	Edge determination improvement of scanning electron microscope images by inpainting and anisotropic diffusion for measurement and analysis of microstructures. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021 , 176, 109217	4.6	0
226	Robust block-matching algorithm for motion estimation using an anti-interference similarity criterion and the bilateral optimization scheme. <i>Applied Optics</i> , 2021 , 60, 4746-4754	1.7	
225	Coupled dynamic modeling of piezo-actuated compliant mechanisms subjected to external loads. <i>Mechanism and Machine Theory</i> , 2021 , 160, 104283	4	9
224	Pose Sensing and Servo Control of the Compliant Nanopositioners Based on Microscopic Vision. <i>IEEE Transactions on Industrial Electronics</i> , 2021 , 68, 3324-3335	8.9	9
223	Single-step printing of high-resolution, high-aspect ratio silver lines through laser-induced forward transfer. <i>Optics and Laser Technology</i> , 2021 , 133, 106514	4.2	3
222	An 89-line code for geometrically nonlinear topology optimization written in FreeFEM. <i>Structural and Multidisciplinary Optimization</i> , 2021 , 63, 1015-1027	3.6	9
221	A Simultaneous Optimization Method of Calibration and Measurement for a Typical HandEye Positioning System. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021 , 70, 1-11	5.2	4
220	A Damped Decoupled XY Nanopositioning Stage Embedding Graded Local Resonators. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021 , 1-1	5.5	1

219	Motion measurement system of compliant mechanisms using computer micro-vision. <i>Optics Express</i> , 2021 , 29, 5006-5017	3.3	3
218	Explicit structural topology optimization using moving wide Bezier components with constrained ends. <i>Structural and Multidisciplinary Optimization</i> , 2021 , 64, 53-70	3.6	6
217	Topology optimization of flexure hinges with a prescribed compliance matrix based on the adaptive spring model and stress constraint. <i>Precision Engineering</i> , 2021 , 72, 397-408	2.9	1
216	Deep multi-scale separable convolutional network with triple attention mechanism: A novel multi-task domain adaptation method for intelligent fault diagnosis. <i>Expert Systems With Applications</i> , 2021 , 182, 115087	7.8	6
215	Multi-objective Ensemble of Regression Chains Prediction Algorithm for Pose Correction Errors of Precise Vision-based Printing Equipment. <i>Journal of Physics: Conference Series</i> , 2020 , 1550, 032087	0.3	
214	Radial basis function neural network vibration control of a flexible planar parallel manipulator based on acceleration feedback. <i>JVC/Journal of Vibration and Control</i> , 2020 , 107754632097740	2	2
213	Intelligent fault diagnosis of rolling bearings based on normalized CNN considering data imbalance and variable working conditions. <i>Knowledge-Based Systems</i> , 2020 , 199, 105971	7.3	82
212	Deep multi-scale convolutional transfer learning network: A novel method for intelligent fault diagnosis of rolling bearings under variable working conditions and domains. <i>Neurocomputing</i> , 2020 , 407, 24-38	5.4	46
211	Topology optimization of a cable-driven soft robotic gripper. <i>Structural and Multidisciplinary Optimization</i> , 2020 , 62, 2749-2763	3.6	11
210	An Improved Template-Matching-Based Pose Tracking Method for Planar Nanopositioning Stages Using Enhanced Correlation Coefficient. <i>IEEE Sensors Journal</i> , 2020 , 20, 6378-6387	4	1
209	Design of dielectric elastomer actuators using topology optimization on electrodes. <i>Smart Materials and Structures</i> , 2020 , 29, 075029	3.4	4
208	Dynamic modeling and comparative analysis of a 3-PRR parallel robot with multiple lubricated joints. <i>International Journal of Mechanics and Materials in Design</i> , 2020 , 16, 541-555	2.5	5
207	Topology optimization of compliant mechanism considering actual output displacement using adaptive output spring stiffness. <i>Mechanism and Machine Theory</i> , 2020 , 146, 103728	4	9
206	A CPRBM-based method for large-deflection analysis of contact-aided compliant mechanisms considering beam-to-beam contacts. <i>Mechanism and Machine Theory</i> , 2020 , 145, 103700	4	15
205	Multi-scale Calibration Board Based Accurate Calibration of a Scanning Electron Microscope. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020 , 790, 012177	0.4	
204	Joint torque estimation for the human arm from sEMG using backpropagation neural networks and autoencoders. <i>Biomedical Signal Processing and Control</i> , 2020 , 62, 102051	4.9	5
203	A generalized pseudo-rigid-body PPRR model for both straight and circular beams in compliant mechanisms. <i>Mechanism and Machine Theory</i> , 2020 , 154, 104054	4	10
202	Topology optimization of distributed flexure hinges with desired performance. <i>Engineering Optimization</i> , 2020 , 52, 405-425	2	9

201	A robust weld seam recognition method under heavy noise based on structured-light vision. <i>Robotics and Computer-Integrated Manufacturing</i> , 2020 , 61, 101821	9.2	28
200	Design of compliant mechanisms using continuum topology optimization: A review. <i>Mechanism and Machine Theory</i> , 2020 , 143, 103622	4	111
199	Novel Method to Simultaneously Adjust the Size and pH Value of Individual Microdroplets in Silicone Oil. <i>IEEE Access</i> , 2019 , 7, 114183-114190	3.5	1
198	Design and Analysis of Translational Joint Using Corrugated Flexure Units with Variable thickness Segments. <i>Mechanisms and Machine Science</i> , 2019 , 2249-2259	0.3	
197	A new kind of Multi-Notched Flexure Hinges Based 3-RRR Micro-Positioning Stage. <i>Mechanisms and Machine Science</i> , 2019 , 1589-1598	0.3	
196	A magnification-continuous calibration method for SEM-based nanorobotic manipulation systems. <i>Review of Scientific Instruments</i> , 2019 , 90, 053706	1.7	5
195	Development of a 3-PRR Precision Tracking System with Full Closed-Loop Measurement and Control. <i>Sensors</i> , 2019 , 19,	3.8	6
194	Topology optimization of bistable mechanisms with maximized differences between switching forces in forward and backward direction. <i>Mechanism and Machine Theory</i> , 2019 , 139, 131-143	4	16
193	Strain-based multimode integrating sensing for a bridge-type compliant amplifier. <i>Measurement Science and Technology</i> , 2019 , 30, 105106	2	2
192	Nonlinear Hysteresis Modeling of Piezoelectric Actuators Using a Generalized Bouc-Wen Model. <i>Micromachines</i> , 2019 , 10,	3.3	12
191	A review of nonlinear hysteresis modeling and control of piezoelectric actuators. <i>AIP Advances</i> , 2019 , 9, 040702	1.5	28
190	High-Accuracy Calibration of a Visual Motion Measurement System for Planar 3-DOF Robots Using Gaussian Process. <i>IEEE Sensors Journal</i> , 2019 , 19, 7659-7667	4	2
189	Topological and Shape Optimization of Flexure Hinges for Designing Compliant Mechanisms Using the Level Set Method. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2019 , 32,	2.5	9
188	Effects of Temperature and Residual Stresses on the Output Characteristics of a Piezoresistive Pressure Sensor. <i>IEEE Access</i> , 2019 , 7, 27668-27676	3.5	14
187	Imposing minimum length scale in moving morphable component (MMC)-based topology optimization using an effective connection status (ECS) control method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019 , 351, 667-693	5.7	27
186	Unified motion reliability analysis and comparison study of planar parallel manipulators with interval joint clearance variables. <i>Mechanism and Machine Theory</i> , 2019 , 138, 58-75	4	32
185	Design of dielectric elastomer actuator using topology optimization method based on genetic algorithm. <i>Smart Materials and Structures</i> , 2019 , 28, 065013	3.4	5
184	Realtime in-plane displacements tracking of the precision positioning stage based on computer micro-vision. <i>Mechanical Systems and Signal Processing</i> , 2019 , 124, 111-123	7.8	23

183	Design of Planar Large-Deflection Compliant Mechanisms With Decoupled Multi-Input-Output Using Topology Optimization. <i>Journal of Mechanisms and Robotics</i> , 2019 , 11,	2.2	15
182	Self-excited Vibration Control of the Flexible Planar Parallel 3-RRR Robot. <i>JVC/Journal of Vibration and Control</i> , 2019 , 25, 351-361	2	3
181	Online Precise Motion Measurement of 3-DOF Nanopositioners Based on Image Correlation. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2019 , 68, 782-790	5.2	13
180	Eye-to-Hand Robotic Visual Tracking Based on Template Matching on FPGAs. <i>IEEE Access</i> , 2019 , 7, 8887039880	3.9	3
179	Nonlinear topology optimization of parallel-grasping microgripper. <i>Precision Engineering</i> , 2019 , 60, 152-159	1.5	11
178	A novel flexural lamina emergent spatial joint. <i>Mechanism and Machine Theory</i> , 2019 , 142, 103582	4	13
177	Topological Synthesis of Compliant Mechanisms Using a Level Set-Based Robust Formulation. <i>Lecture Notes in Computer Science</i> , 2019 , 319-332	0.9	
176	Natural Gesture Control of a Delta Robot Using Leap Motion. <i>Journal of Physics: Conference Series</i> , 2019 , 1187, 032042	0.3	5
175	Recent advances in non-contact force sensors used for micro/nano manipulation. <i>Sensors and Actuators A: Physical</i> , 2019 , 296, 155-177	3.9	22
174	A novel compression-based compliant orthogonal displacement amplification mechanism for the typical actuators used in micro-grasping. <i>Sensors and Actuators A: Physical</i> , 2019 , 297, 111463	3.9	2
173	Integrated Design of Actuation and Mechanism of Dielectric Elastomers Using Topology Optimization Based on Fat Bezier Curves. <i>Soft Robotics</i> , 2019 , 6, 644-656	9.2	11
172	Exploration of Translational Joint Design Using Corrugated Flexure Units With Bézier Curve Segments. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2019 , 141,	3	2
171	Topological design of compliant orthogonal displacement amplification mechanism under the unidirectional input force. <i>Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica</i> , 2019 , 49, 579-588	1.3	2
170	Calibration method for hand-eye system with rotation and translation couplings. <i>Applied Optics</i> , 2019 , 58, 5375-5387	1.7	8
169	Design and Analysis of a Series Elastic Component Based on Topology Optimization. <i>Mechanisms and Machine Science</i> , 2019 , 2129-2138	0.3	
168	Corrections to High-Accuracy Calibration of a Visual Motion Measurement System for Planar 3-DOF Robots Using Gaussian Process. <i>IEEE Sensors Journal</i> , 2019 , 19, 12510-12510	4	
167	Design and Waveform Assessment of a Flexible-Structure-Based Inertia-Drive Motor. <i>Micromachines</i> , 2019 , 10,	3.3	1
166	Laser direct printing of solder paste. <i>AIP Advances</i> , 2019 , 9, 125306	1.5	4

165	Development of an SEMG-Handgrip Force Model Based on Cross Model Selection. <i>IEEE Sensors Journal</i> , 2019 , 19, 1829-1838	4	4
164	Design and analysis of translational joints using corrugated flexural beams with conic curve segments. <i>Mechanism and Machine Theory</i> , 2019 , 132, 223-235	4	5
163	A 213-line topology optimization code for geometrically nonlinear structures. <i>Structural and Multidisciplinary Optimization</i> , 2019 , 59, 1863-1879	3.6	34
162	The recognition of grasping force using LDA. <i>Biomedical Signal Processing and Control</i> , 2019 , 47, 393-400	4.9	16
161	Origami Kaleidocycle-Inspired Symmetric Multistable Compliant Mechanisms. <i>Journal of Mechanisms and Robotics</i> , 2019 , 11,	2.2	12
160	Dynamic analysis of open-loop mechanisms with multiple spatial revolute clearance joints. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2019 , 233, 593-610	1.3	6
159	A robust rotation-invariance displacement measurement method for a micro-/nano-positioning system. <i>Measurement Science and Technology</i> , 2018 , 29, 055402	2	8
158	A simplified focusing and astigmatism correction method for a scanning electron microscope. <i>AIP Advances</i> , 2018 , 8, 015124	1.5	4
157	Error modelling and motion reliability analysis of a planar parallel manipulator with multiple uncertainties. <i>Mechanism and Machine Theory</i> , 2018 , 124, 55-72	4	53
156	Vision-based adaptive control of a 3-RRR parallel positioning system. <i>Science China Technological Sciences</i> , 2018 , 61, 1253-1264	3.5	11
155	The Development of a New Piezoresistive Pressure Sensor for Low Pressures. <i>IEEE Transactions on Industrial Electronics</i> , 2018 , 65, 6487-6496	8.9	48
154	Parameters Optimization and Experiment of A Planar Parallel 3-DOF Nanopositioning System. <i>IEEE Transactions on Industrial Electronics</i> , 2018 , 65, 2388-2397	8.9	54
153	Topology Optimization of Compliant Parallel Mechanisms 2018 , 121-160		
152	Design of buckling-induced mechanical metamaterials for energy absorption using topology optimization. <i>Structural and Multidisciplinary Optimization</i> , 2018 , 58, 1395-1410	3.6	30
151	Design of a rotary dielectric elastomer actuator using a topology optimization method based on pairs of curves. <i>Smart Materials and Structures</i> , 2018 , 27, 055011	3.4	18
150	Generating ultra-small droplets based on a double-orifice technique. <i>Sensors and Actuators B: Chemical</i> , 2018 , 255, 2011-2017	8.5	7
149	Structural Topology Optimization Using a Moving Morphable Component-Based Method Considering Geometrical Nonlinearity. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2018 , 140,	3	24
148	Topology Optimization of Distributed Compliant Mechanisms 2018 , 81-119		2

147	Estimation of Handgrip Force from SEMG Based on Wavelet Scale Selection. <i>Sensors</i> , 2018 , 18,	3.8	11
146	Design of fully decoupled compliant mechanisms with multiple degrees of freedom using topology optimization. <i>Mechanism and Machine Theory</i> , 2018 , 126, 413-428	4	20
145	Topology Optimization of Compliant Mechanisms 2018 ,		18
144	Topology optimization of fusiform muscles with a maximum contraction. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2018 , 34, e3096	2.6	4
143	A Level Set Method With a Bounded Diffusion for Structural Topology Optimization. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2018 , 140,	3	9
142	Introduction to Compliant Mechanisms and Design Methods 2018 , 1-24		
141	A monocular vision system for online pose measurement of a 3RRR planar parallel manipulator. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2018 , 92, 3-17	2.9	16
140	Optimization of a 2-DOF micro-positioning stage using corrugated flexure units. <i>Mechanism and Machine Theory</i> , 2018 , 121, 683-696	4	41
139	Jacobian-Based Topology Optimization Method Using an Improved Stiffness Evaluation. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2018 , 140,	3	12
138	Estimation of human arm motion based on sEMG in human-robot cooperative manipulation 2018 ,		1
137	Dynamic Comparison of a 3-Degrees-of-Freedom Parallel Manipulator With Multiple Dry Clearance Joints and With Lubricated Joints 2018 ,		1
136	A three-step displacement measurement method for a 3-DOF macro-micro positioning stage. <i>Review of Scientific Instruments</i> , 2018 , 89, 113701	1.7	1
135	An enhanced Bouc-Wen model for characterizing rate-dependent hysteresis of piezoelectric actuators. <i>Review of Scientific Instruments</i> , 2018 , 89, 115002	1.7	19
134	An approximate internal model-based neural control for serial robots with multiple clearance joints. <i>Advances in Mechanical Engineering</i> , 2018 , 10, 168781401881232	1.2	1
133	Study on Residual Vibration Suppress of a 3-DOF Flexible Parallel Robot Mechanism. <i>Sensors</i> , 2018 , 18,	3.8	5
132	Topology Optimization of Compliant Mechanisms Using Moving Morphable Components with Flexure Hinge Characteristic 2018 ,		2
131	Design Optimization and Analysis of a Damped Flexure-Guided Stage 2018 ,		2
130	Design and experimental evaluation of a compliant mechanism-based stepping-motion actuator with multi-mode. <i>Smart Materials and Structures</i> , 2018 , 27, 105014	3.4	9

129	Mechanical Structural Design of a Piezoresistive Pressure Sensor for Low-Pressure Measurement: A Computational Analysis by Increases in the Sensor Sensitivity. <i>Sensors</i> , 2018 , 18,	3.8	27
128	Topology Optimization of Flexure Hinges 2018 , 25-80		
127	Design, modeling and test of a novel compliant orthogonal displacement amplification mechanism for the compact micro-grasping system. <i>Microsystem Technologies</i> , 2017 , 23, 2485-2498	1.7	14
126	Design of diaphragm structure for piezoresistive pressure sensor using topology optimization. <i>Structural and Multidisciplinary Optimization</i> , 2017 , 55, 317-329	3.6	17
125	Design and analysis of a multi-notched flexure hinge for compliant mechanisms. <i>Precision Engineering</i> , 2017 , 48, 292-304	2.9	50
124	Minimizing the influence of revolute joint clearance using the planar redundantly actuated mechanism. <i>Robotics and Computer-Integrated Manufacturing</i> , 2017 , 46, 104-113	9.2	23
123	Optimal design of a planar parallel 3-DOF nanopositioner with multi-objective. <i>Mechanism and Machine Theory</i> , 2017 , 112, 61-83	4	54
122	Line-based calibration of a micro-vision motion measurement system. <i>Optics and Lasers in Engineering</i> , 2017 , 93, 40-46	4.6	24
121	Full closed-loop controls of micro/nano positioning system with nonlinear hysteresis using micro-vision system. <i>Sensors and Actuators A: Physical</i> , 2017 , 257, 125-133	3.9	29
120	A high accuracy algorithm of displacement measurement for a micro-positioning stage. <i>AIP Advances</i> , 2017 , 7, 055301	1.5	10
119	Design and Myoelectric Control of an Anthropomorphic Prosthetic Hand. <i>Journal of Bionic Engineering</i> , 2017 , 14, 47-59	2.7	60
118	A Soft Gripper Based on Dielectric Elastomer Actuator 2017 ,		1
117	Error modeling and calibration of a 4RRR redundant positioning system. <i>AIP Advances</i> , 2017 , 7, 095009	1.5	6
116	Dynamic analysis of a 3-PRR parallel mechanism by considering joint clearances. <i>Nonlinear Dynamics</i> , 2017 , 90, 405-423	5	16
115	Nonlinear analysis and optimal design of a novel piezoelectric-driven compliant microgripper. <i>Mechanism and Machine Theory</i> , 2017 , 118, 32-52	4	35
114	Adaptive differential correspondence imaging based on sorting technique. <i>AIP Advances</i> , 2017 , 7, 045121	1.5	4
113	A New Calibration Method for a Directly Driven 3PRR Positioning System. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2017 , 85, 613-631	2.9	5
112	Adaptive positioning control of an ultrasonic linear motor system. <i>Robotics and Computer-Integrated Manufacturing</i> , 2017 , 44, 156-173	9.2	17

111	Design of flexure hinges based on stress-constrained topology optimization. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2017 , 231, 4635-4645	1.3	18
110	2017 ,		2
109	A kind of soft pneumatic actuator based on multi-material 3D print technology 2017 ,		5
108	Peg-in-hole assembly based on hybrid vision/force guidance and dual-arm coordination 2017 ,		2
107	Design of a rotary dielectric elastomer actuator using topology optimization method 2017 ,		3
106	Peg-in-Hole Assembly Based on Two-phase Scheme and F/T Sensor for Dual-arm Robot. <i>Sensors</i> , 2017 , 17,	3.8	18
105	Micro-motion detection of the 3-DOF precision positioning stage based on iterative optimized template matching. <i>Applied Optics</i> , 2017 , 56, 9435-9443	1.7	13
104	The Local Optimum in Topology Optimization of Compliant Mechanisms. <i>Lecture Notes in Electrical Engineering</i> , 2017 , 621-632	0.2	2
103	A Boundary Reconstruction Algorithm Used in Compliant Mechanism Topology Optimization Design. <i>Lecture Notes in Electrical Engineering</i> , 2017 , 657-666	0.2	1
102	Optimal Design of a Novel Compliant Orthogonal Displacement Amplification Mechanism Considering Static and Dynamic Properties. <i>Lecture Notes in Electrical Engineering</i> , 2017 , 689-700	0.2	
101	Design of a 3DOF Precision Positioning Stage Based on Corrugated Flexible Units. <i>Lecture Notes in Electrical Engineering</i> , 2017 , 723-733	0.2	2
100	Accuracy Analysis of a 3-DOF Mechanism with Joint Clearances Under Different Working Modes. <i>Lecture Notes in Electrical Engineering</i> , 2017 , 1199-1209	0.2	
99	Elastodynamics of a Rigid-Flexible 3-RRR Mechanism with Joint Clearances. <i>Lecture Notes in Electrical Engineering</i> , 2017 , 1185-1198	0.2	
98	Minimizing the Difference Between Two Output Performances to Avoid de Facto Hinges in Topology-Optimized Compliant Mechanisms. <i>Lecture Notes in Electrical Engineering</i> , 2017 , 633-643	0.2	
97	A New Position and Attitude Measurement Method for Planar Parallel Mechanism. <i>Lecture Notes in Electrical Engineering</i> , 2017 , 1461-1474	0.2	
96	A new topology optimization method for planar compliant parallel mechanisms. <i>Mechanism and Machine Theory</i> , 2016 , 95, 42-58	4	45
95	A vision-based vibration sensing and active control for a piezoelectric flexible cantilever plate. <i>JVC/Journal of Vibration and Control</i> , 2016 , 22, 1320-1337	2	15
94	Strain-based output/input sensing cell integrated within a compliant bridge-type mechanism 2016 ,		1

93	A Design Method for LEDs Arrays Structure Illumination. <i>Journal of Display Technology</i> , 2016 , 12, 1177-1184	6
92	Tracking control of piezoelectric actuators using a polynomial-based hysteresis model. <i>AIP Advances</i> , 2016 , 6, 065204	1.5 8
91	Experiments on resonant vibration suppression of a piezoelectric flexible clamped-clamped plate using filtered-U least mean square algorithm. <i>Journal of Intelligent Material Systems and Structures</i> , 2016 , 27, 166-194	2.3 3
90	Precision Alignment of Optical Fibers Based on Telecentric Stereo Microvision. <i>IEEE/ASME Transactions on Mechatronics</i> , 2016 , 21, 1924-1934	5.5 28
89	Displacement measurement system for inverters using computer micro-vision. <i>Optics and Lasers in Engineering</i> , 2016 , 81, 113-118	4.6 20
88	Vibration control of a pneumatic driven piezoelectric flexible manipulator using self-organizing map based multiple models. <i>Mechanical Systems and Signal Processing</i> , 2016 , 70-71, 345-372	7.8 21
87	Design and analysis of a high-accuracy flexure hinge. <i>Review of Scientific Instruments</i> , 2016 , 87, 055106	1.7 33
86	A generalized Prandtl-Ishlinskii model for characterizing the rate-independent and rate-dependent hysteresis of piezoelectric actuators. <i>Review of Scientific Instruments</i> , 2016 , 87, 035002	1.7 29
85	Motion Reliability Analysis of a 3-RRR Parallel Manipulator With Random and Interval Variables 2016 ,	1
84	High-Quality Computational Ghost Imaging Using an Optimum Distance Search Method. <i>IEEE Photonics Journal</i> , 2016 , 8, 1-9	1.8 3
83	A novel microgripper hybrid driven by a piezoelectric stack actuator and piezoelectric cantilever actuators. <i>Review of Scientific Instruments</i> , 2016 , 87, 115003	1.7 21
82	Displacement measurement of the compliant positioning stage based on a computer micro-vision method. <i>AIP Advances</i> , 2016 , 6, 025009	1.5 10
81	A comparative study of planar 3-RRR and 4-RRR mechanisms with joint clearances. <i>Robotics and Computer-Integrated Manufacturing</i> , 2016 , 40, 24-33	9.2 35
80	High-precision displacement measurement method for three degrees of freedom-compliant mechanisms based on computer micro-vision. <i>Applied Optics</i> , 2016 , 55, 2594-600	0.2 12
79	Optimize heat conduction problem using level set method with a weighting based velocity constructing scheme. <i>International Journal of Heat and Mass Transfer</i> , 2016 , 99, 441-451	4.9 10
78	A planar 3-DOF nanopositioning platform with large magnification. <i>Precision Engineering</i> , 2016 , 46, 221-231	48
77	Bi-directional evolutionary level set method for topology optimization. <i>Engineering Optimization</i> , 2015 , 47, 390-406	2 11
76	Damped leaf flexure hinge. <i>Review of Scientific Instruments</i> , 2015 , 86, 055002	1.7 9

75	Preload characteristics identification of the piezoelectric-actuated 1-DOF compliant nanopositioning platform. <i>Frontiers of Mechanical Engineering</i> , 2015 , 10, 20-36	3.3	7
74	Filter the shape sensitivity in level set-based topology optimization methods. <i>Structural and Multidisciplinary Optimization</i> , 2015 , 51, 1035-1049	3.6	4
73	Structural topology and shape optimization using a level set method with distance-suppression scheme. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015 , 283, 1214-1239	5.7	38
72	Fatigue reliability based optimal design of planar compliant micropositioning stages. <i>Review of Scientific Instruments</i> , 2015 , 86, 105117	1.7	11
71	Stiffness analysis of corrugated flexure beam used in compliant mechanisms. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2015 , 28, 776-784	2.5	10
70	Dynamic analysis of planar 3-RRR flexible parallel robots under uniform temperature change. <i>JVC/Journal of Vibration and Control</i> , 2015 , 21, 81-104	2	13
69	Vibration control of two-connected piezoelectric flexible plate using nonlinear algorithm and T-S fuzzy controller. <i>Journal of Intelligent Material Systems and Structures</i> , 2015 , 26, 219-243	2.3	13
68	Dynamic analysis of a 3-RRR parallel mechanism with multiple clearance joints. <i>Mechanism and Machine Theory</i> , 2014 , 78, 105-115	4	77
67	An optimization approach for black-and-white and hinge-removal topology designs. <i>Journal of Mechanical Science and Technology</i> , 2014 , 28, 581-593	1.6	4
66	Pseudo-rigid-body model for corrugated cantilever beam used in compliant mechanisms. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2014 , 27, 122-129	2.5	23
65	A multi-objective method of hinge-free compliant mechanism optimization. <i>Structural and Multidisciplinary Optimization</i> , 2014 , 49, 431-440	3.6	31
64	Realtime recognition of multi-finger prehensile gestures. <i>Biomedical Signal Processing and Control</i> , 2014 , 13, 262-269	4.9	15
63	Design of single-axis flexure hinges using continuum topology optimization method. <i>Science China Technological Sciences</i> , 2014 , 57, 560-567	3.5	32
62	Design and test of a novel planar 3-DOF precision positioning platform with a large magnification 2014 ,		2
61	Dynamic Analysis of Planar 3-RRR Flexible Parallel Robots with Dynamic Stiffening. <i>Shock and Vibration</i> , 2014 , 2014, 1-13	1.1	7
60	Multi-material topology optimization of complaint mechanism using ground structure approach 2014 ,		1
59	Dynamic Analysis of a 3-RRR Parallel Robot With Joint Clearances Using Natural Coordinates 2014 ,		2
58	Level Set-Based Topology Optimization of Hinge-Free Compliant Mechanisms Using a Two-Step Elastic Modeling Method. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2014 , 136,	3	30

57	A Velocity Predictor-Corrector Scheme in Level Set-Based Topology Optimization to Improve Computational Efficiency. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2014 , 136,	3	7
56	Leaf flexure hinge with damping layers: Theoretical model and experiments 2014 ,		1
55	Feature-Based Object Location of IC Pins by Using Fast Run Length Encoding BLOB Analysis. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2014 , 4, 1887-1898	1.7	10
54	Topology optimization of hinge-free compliant mechanisms using level set methods. <i>Engineering Optimization</i> , 2014 , 46, 580-605	2	17
53	Experimental Study on Joint Positioning Control of an Ultrasonic Linear Motor Driven Planar Parallel Platform. <i>Lecture Notes in Computer Science</i> , 2014 , 48-59	0.9	2
52	Topology optimization of hinge-free compliant mechanisms with multiple outputs using level set method. <i>Structural and Multidisciplinary Optimization</i> , 2013 , 47, 659-672	3.6	49
51	Hybrid flexure hinges. <i>Review of Scientific Instruments</i> , 2013 , 84, 085004	1.7	37
50	The recognition of multi-finger prehensile postures using LDA. <i>Biomedical Signal Processing and Control</i> , 2013 , 8, 706-712	4.9	30
49	Classification of Solder Joint Using Feature Selection Based on Bayes and Support Vector Machine. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2013 , 3, 516-522	1.7	40
48	A new level set method for topology optimization of distributed compliant mechanisms. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 91, 843-871	2.4	40
47	Compliant mechanisms design based on pairs of curves. <i>Science China Technological Sciences</i> , 2012 , 55, 2099-2106	3.5	24
46	Feature-Extraction-Based Inspection Algorithm for IC Solder Joints. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2011 , 1, 689-694	1.7	31
45	An intelligent environmental monitoring system based on autonomous mobile robot 2011 ,		6
44	The superior mobility and function of W-Climbot A bio-inspired modular biped wall-climbing robot 2011 ,		3
43	A multiscale optimal filter method for micro-motion measurement with high accuracy. <i>Measurement: Journal of the International Measurement Confederation</i> , 2011 , 44, 96-101	4.6	0
42	A novel 6-DoF biped active walking robot Walking gaits, patterns and experiments 2011 ,		2
41	Workspace Generation for Multifingered Manipulation. <i>Advanced Robotics</i> , 2011 , 25, 2293-2317	1.7	7
40	W-Climbot: A modular biped wall-climbing robot 2010 ,		11

39	Topology optimization of thermo-mechanical continuum structure 2010 ,		3
38	Topology optimization of multiple inputs and multiple outputs compliant mechanisms using the ground structure approach 2010 ,		1
37	Improvement of an aerodynamic model for biomimetic flapping-wing robots 2010 ,		1
36	2010 ,		5
35	Modeling and planning for stable walking of a novel 6-DOF biped robot 2010 ,		1
34	Dynamic analysis of the precision compliant mechanisms considering thermal effect. <i>Precision Engineering</i> , 2010 , 34, 592-606	2.9	13
33	A high speed AOI algorithm for chip component based on image difference 2009 ,		4
32	Closed-Form Equations of Mass Matrix of the Single-Axis Right Circular Flexure Hinge 2009 ,		1
31	Maximization of Values of Simple and Multiple Eigenfrequencies of Continuum Structures Using Topology Optimization 2009 ,		4
30	Dynamic analysis of flexible linkage mechanisms under uniform temperature change. <i>Journal of Sound and Vibration</i> , 2009 , 319, 570-592	3.9	14
29	Active vibration control of a flexible beam using a non-collocated acceleration sensor and piezoelectric patch actuator. <i>Journal of Sound and Vibration</i> , 2009 , 326, 438-455	3.9	98
28	1-DoF robotic joint modules and their applications in new robotic systems 2009 ,		3
27	Climbing gaits of a modular biped climbing robot 2009 ,		11
26	A novel mobile robot capable of changing its wheel distance and body configuration 2009 ,		5
25	An AOI algorithm for PCB based on feature extraction 2008 ,		2
24	Workspace of 3-D multifingered manipulation 2008 ,		2
23	Reliability-based topology optimization of continuous structures 2008 ,		1
22	Input coupling analysis and optimal design of a 3-DOF compliant micro-positioning stage. <i>Mechanism and Machine Theory</i> , 2008 , 43, 400-410	4	128

21	A level set method for reliability-based topology optimization of compliant mechanisms. <i>Science in China Series D: Earth Sciences</i> , 2008 , 51, 443-455		16
20	Multi-image gradient-based algorithms for motion measurement using wavelet transform. <i>Frontiers of Electrical and Electronic Engineering in China: Selected Publications From Chinese Universities</i> , 2008 , 3, 183-187		
19	An Integrated Inspection Method based on Machine Vision for Solder Paste Depositing 2007 ,		1
18	Robust multiscale algorithms for gradient-based motion estimation. <i>International Journal of Imaging Systems and Technology</i> , 2007 , 17, 333-340	2.5	2
17	Multiscale MSE-minimizing filters for gradient-based motion estimation. <i>Measurement: Journal of the International Measurement Confederation</i> , 2007 , 40, 841-848	4.6	2
16	Topology optimization of multiple inputs and multiple outputs compliant mechanisms. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2007 , 20, 82	2.5	9
15	Optimal Placement of Piezoelectric Sensors and Actuators for Controlled Flexible Linkage Mechanisms. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , 2006 , 128, 256-260	1.6	12
14	TOPOLOGY OPTIMIZATION OF MULTIPLE INPUTS AND OUTPUTS COMPLIANT MECHANISM WITH COUPLING TERMS CONTROL. <i>Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering</i> , 2006 , 42, 162	1.3	7
13	Wavelet-based interpolation algorithm for topology extraction of compliant mechanisms 2005 ,		1
12	Multiresolution edge detection in noisy images using wavelet transform 2005 ,		1
11	Integrated optimal design of flexible mechanism and vibration control. <i>International Journal of Mechanical Sciences</i> , 2004 , 46, 1607-1620	5.5	12
10	Active noise control of flexible linkage mechanism with piezoelectric actuators. <i>Computers and Structures</i> , 2003 , 81, 2045-2051	4.5	10
9	TOPOLOGY OPTIMOZATION OF COMPLIANT MECHANISMS. <i>Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering</i> , 2003 , 39, 47	1.3	23
8	Complex Mode Dynamic Analysis of Flexible Mechanism Systems with Piezoelectric Sensors and Actuators. <i>Multibody System Dynamics</i> , 2002 , 8, 51-70	2.8	11
7	Dynamic responses of flexible linkage mechanisms with viscoelastic constrained layer damping treatment. <i>Computers and Structures</i> , 2001 , 79, 1265-1274	4.5	16
6	Finite dynamic element analysis for high-speed flexible linkage mechanisms. <i>Computers and Structures</i> , 1996 , 60, 787-796	4.5	5
5	Research on Trajectory Planning and Fuzzy Predictive Vibration Control for a Rotating Flexible Dual-Beam System. <i>Journal of Vibration Engineering and Technologies</i> , 1	2	0
4	Multi-material topology optimization of large-displacement compliant mechanisms considering material-dependent boundary condition. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 095440622110361	1.3	

- 3 Self-excited vibration of a 3-PRR planar parallel robot. *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*,095440622110095 1.3
- 2 Vibration control of three coupled flexible beams using reinforcement learning algorithm based on proximal policy optimization. *Journal of Intelligent Material Systems and Structures*,1045389X2210933 2.3
- 1 Automatic Design of Dielectric Elastomer Based Crawling Robots Using Shape and Topology Optimization. *Journal of Mechanisms and Robotics*,1-12 2.2 1