

Xian-min Zhang

List of Publications by Citations

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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
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h-index

43
g-index

291
ext. papers

4,094
ext. citations

3.1
avg, IF

6.3
L-index

#	Paper	IF	Citations
254	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
253	Design of compliant mechanisms using continuum topology optimization: A review. <i>Mechanism and Machine Theory</i> , 2020 , 143, 103622	4	111
252	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
251	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
250	Dynamic analysis of a 3-RRR parallel mechanism with multiple clearance joints. <i>Mechanism and Machine Theory</i> , 2014 , 78, 105-115	4	77
249	Design and Myoelectric Control of an Anthropomorphic Prosthetic Hand. <i>Journal of Bionic Engineering</i> , 2017 , 14, 47-59	2.7	60
248	Optimal design of a planar parallel 3-DOF nanopositioner with multi-objective. <i>Mechanism and Machine Theory</i> , 2017 , 112, 61-83	4	54
247	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
246	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
245	Design and analysis of a multi-notched flexure hinge for compliant mechanisms. <i>Precision Engineering</i> , 2017 , 48, 292-304	2.9	50
244	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
243	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
242	A planar 3-DOF nanopositioning platform with large magnification. <i>Precision Engineering</i> , 2016 , 46, 221-231	4.8	48
241	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
240	A new topology optimization method for planar compliant parallel mechanisms. <i>Mechanism and Machine Theory</i> , 2016 , 95, 42-58	4	45
239	Optimization of a 2-DOF micro-positioning stage using corrugated flexure units. <i>Mechanism and Machine Theory</i> , 2018 , 121, 683-696	4	41
238	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

237	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
236	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
235	Hybrid flexure hinges. <i>Review of Scientific Instruments</i> , 2013 , 84, 085004	1.7	37
234	Nonlinear analysis and optimal design of a novel piezoelectric-driven compliant microgripper. <i>Mechanism and Machine Theory</i> , 2017 , 118, 32-52	4	35
233	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
232	A 213-line topology optimization code for geometrically nonlinear structures. <i>Structural and Multidisciplinary Optimization</i> , 2019 , 59, 1863-1879	3.6	34
231	Design and analysis of a high-accuracy flexure hinge. <i>Review of Scientific Instruments</i> , 2016 , 87, 055106	1.7	33
230	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
229	Design of single-axis flexure hinges using continuum topology optimization method. <i>Science China Technological Sciences</i> , 2014 , 57, 560-567	3.5	32
228	A multi-objective method of hinge-free compliant mechanism optimization. <i>Structural and Multidisciplinary Optimization</i> , 2014 , 49, 431-440	3.6	31
227	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
226	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
225	The recognition of multi-finger prehensile postures using LDA. <i>Biomedical Signal Processing and Control</i> , 2013 , 8, 706-712	4.9	30
224	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
223	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
222	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
221	A review of nonlinear hysteresis modeling and control of piezoelectric actuators. <i>AIP Advances</i> , 2019 , 9, 040702	1.5	28
220	Precision Alignment of Optical Fibers Based on Telecentric Stereo Microvision. <i>IEEE/ASME Transactions on Mechatronics</i> , 2016 , 21, 1924-1934	5.5	28

219	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
218	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
217	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
216	Line-based calibration of a micro-vision motion measurement system. <i>Optics and Lasers in Engineering</i> , 2017 , 93, 40-46	4.6	24
215	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
214	Compliant mechanisms design based on pairs of curves. <i>Science China Technological Sciences</i> , 2012 , 55, 2099-2106	3.5	24
213	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
212	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
211	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
210	TOPOLOGY OPTIMOZATION OF COMPLIANT MECHANISMS. <i>Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering</i> , 2003 , 39, 47	1.3	23
209	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
208	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
207	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
206	Displacement measurement system for inverters using computer micro-vision. <i>Optics and Lasers in Engineering</i> , 2016 , 81, 113-118	4.6	20
205	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
204	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
203	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
202	Topology Optimization of Compliant Mechanisms 2018 ,		18

201	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
200	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
199	Design of diaphragm structure for piezoresistive pressure sensor using topology optimization. <i>Structural and Multidisciplinary Optimization</i> , 2017 , 55, 317-329	3.6	17
198	Adaptive positioning control of an ultrasonic linear motor system. <i>Robotics and Computer-Integrated Manufacturing</i> , 2017 , 44, 156-173	9.2	17
197	Topology optimization of hinge-free compliant mechanisms using level set methods. <i>Engineering Optimization</i> , 2014 , 46, 580-605	2	17
196	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
195	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
194	Dynamic analysis of a 3-PRR parallel mechanism by considering joint clearances. <i>Nonlinear Dynamics</i> , 2017 , 90, 405-423	5	16
193	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
192	Dynamic responses of flexible linkage mechanisms with viscoelastic constrained layer damping treatment. <i>Computers and Structures</i> , 2001 , 79, 1265-1274	4.5	16
191	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
190	The recognition of grasping force using LDA. <i>Biomedical Signal Processing and Control</i> , 2019 , 47, 393-400	4.9	16
189	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
188	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
187	Realtime recognition of multi-finger prehensile gestures. <i>Biomedical Signal Processing and Control</i> , 2014 , 13, 262-269	4.9	15
186	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
185	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
184	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

183	Dynamic analysis of flexible linkage mechanisms under uniform temperature change. <i>Journal of Sound and Vibration</i> , 2009 , 319, 570-592	3.9	14
182	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
181	A novel flexural lamina emergent spatial joint. <i>Mechanism and Machine Theory</i> , 2019 , 142, 103582	4	13
180	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
179	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
178	Dynamic analysis of the precision compliant mechanisms considering thermal effect. <i>Precision Engineering</i> , 2010 , 34, 592-606	2.9	13
177	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
176	Nonlinear Hysteresis Modeling of Piezoelectric Actuators Using a Generalized Bouc-Wen Model. <i>Micromachines</i> , 2019 , 10,	3.3	12
175	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
174	Integrated optimal design of flexible mechanism and vibration control. <i>International Journal of Mechanical Sciences</i> , 2004 , 46, 1607-1620	5.5	12
173	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
172	Origami Kaleidocycle-Inspired Symmetric Multistable Compliant Mechanisms. <i>Journal of Mechanisms and Robotics</i> , 2019 , 11,	2.2	12
171	Jacobian-Based Topology Optimization Method Using an Improved Stiffness Evaluation. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2018 , 140,	3	12
170	Bi-directional evolutionary level set method for topology optimization. <i>Engineering Optimization</i> , 2015 , 47, 390-406	2	11
169	Topology optimization of a cable-driven soft robotic gripper. <i>Structural and Multidisciplinary Optimization</i> , 2020 , 62, 2749-2763	3.6	11
168	Vision-based adaptive control of a 3-RRR parallel positioning system. <i>Science China Technological Sciences</i> , 2018 , 61, 1253-1264	3.5	11
167	Estimation of Handgrip Force from SEMG Based on Wavelet Scale Selection. <i>Sensors</i> , 2018 , 18,	3.8	11
166	Nonlinear topology optimization of parallel-grasping microgripper. <i>Precision Engineering</i> , 2019 , 60, 152-159		11

165	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
164	Fatigue reliability based optimal design of planar compliant micropositioning stages. <i>Review of Scientific Instruments</i> , 2015 , 86, 105117	1.7	11
163	W-Climbot: A modular biped wall-climbing robot 2010 ,		11
162	Climbing gaits of a modular biped climbing robot 2009 ,		11
161	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
160	A high accuracy algorithm of displacement measurement for a micro-positioning stage. <i>AIP Advances</i> , 2017 , 7, 055301	1.5	10
159	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
158	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
157	Active noise control of flexible linkage mechanism with piezoelectric actuators. <i>Computers and Structures</i> , 2003 , 81, 2045-2051	4.5	10
156	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
155	Displacement measurement of the compliant positioning stage based on a computer micro-vision method. <i>AIP Advances</i> , 2016 , 6, 025009	1.5	10
154	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
153	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
152	Damped leaf flexure hinge. <i>Review of Scientific Instruments</i> , 2015 , 86, 055002	1.7	9
151	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
150	Eye-to-Hand Robotic Visual Tracking Based on Template Matching on FPGAs. <i>IEEE Access</i> , 2019 , 7, 8887038880		
149	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
148	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

147	Coupled dynamic modeling of piezo-actuated compliant mechanisms subjected to external loads. <i>Mechanism and Machine Theory</i> , 2021 , 160, 104283	4	9
146	Topology optimization of distributed flexure hinges with desired performance. <i>Engineering Optimization</i> , 2020 , 52, 405-425	2	9
145	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
144	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
143	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
142	A robust rotation-invariance displacement measurement method for a micro-/nano-positioning system. <i>Measurement Science and Technology</i> , 2018 , 29, 055402	2	8
141	Tracking control of piezoelectric actuators using a polynomial-based hysteresis model. <i>AIP Advances</i> , 2016 , 6, 065204	1.5	8
140	Calibration method for hand-eye system with rotation and translation couplings. <i>Applied Optics</i> , 2019 , 58, 5375-5387	1.7	8
139	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
138	Generating ultra-small droplets based on a double-orifice technique. <i>Sensors and Actuators B: Chemical</i> , 2018 , 255, 2011-2017	8.5	7
137	Dynamic Analysis of Planar 3-RRR Flexible Parallel Robots with Dynamic Stiffening. <i>Shock and Vibration</i> , 2014 , 2014, 1-13	1.1	7
136	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
135	Workspace Generation for Multifingered Manipulation. <i>Advanced Robotics</i> , 2011 , 25, 2293-2317	1.7	7
134	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
133	Development of a 3-PRR Precision Tracking System with Full Closed-Loop Measurement and Control. <i>Sensors</i> , 2019 , 19,	3.8	6
132	A Design Method for LEDs Arrays Structure Illumination. <i>Journal of Display Technology</i> , 2016 , 12, 1177-1184		6
131	Error modeling and calibration of a 4RRR redundant positioning system. <i>AIP Advances</i> , 2017 , 7, 095009	1.5	6
130	An intelligent environmental monitoring system based on autonomous mobile robot 2011 ,		6

129	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
128	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
127	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
126	A magnification-continuous calibration method for SEM-based nanorobotic manipulation systems. <i>Review of Scientific Instruments</i> , 2019 , 90, 053706	1.7	5
125	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
124	Natural Gesture Control of a Delta Robot Using Leap Motion. <i>Journal of Physics: Conference Series</i> , 2019 , 1187, 032042	0.3	5
123	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
122	A kind of soft pneumatic actuator based on multi-material 3D print technology 2017 ,		5
121	2010 ,		5
120	A novel mobile robot capable of changing its wheel distance and body configuration 2009 ,		5
119	Finite dynamic element analysis for high-speed flexible linkage mechanisms. <i>Computers and Structures</i> , 1996 , 60, 787-796	4.5	5
118	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
117	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
116	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
115	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
114	Design of dielectric elastomer grippers using Bezier curves. <i>Mechanism and Machine Theory</i> , 2021 , 158, 104216	4	5
113	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
112	Study on Residual Vibration Suppress of a 3-DOF Flexible Parallel Robot Mechanism. <i>Sensors</i> , 2018 , 18,	3.8	5

111	Filter the shape sensitivity in level set-based topology optimization methods. <i>Structural and Multidisciplinary Optimization</i> , 2015 , 51, 1035-1049	3.6	4
110	Design of dielectric elastomer actuators using topology optimization on electrodes. <i>Smart Materials and Structures</i> , 2020 , 29, 075029	3.4	4
109	A simplified focusing and astigmatism correction method for a scanning electron microscope. <i>AIP Advances</i> , 2018 , 8, 015124	1.5	4
108	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
107	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
106	Adaptive differential correspondence imaging based on sorting technique. <i>AIP Advances</i> , 2017 , 7, 045121.5	1.5	4
105	A high speed AOI algorithm for chip component based on image difference 2009 ,		4
104	Maximization of Values of Simple and Multiple Eigenfrequencies of Continuum Structures Using Topology Optimization 2009 ,		4
103	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
102	Modular crawling robots using soft pneumatic actuators. <i>Frontiers of Mechanical Engineering</i> , 2021 , 16, 163-175	3.3	4
101	Laser direct printing of solder paste. <i>AIP Advances</i> , 2019 , 9, 125306	1.5	4
100	Development of an SEMG-Handgrip Force Model Based on Cross Model Selection. <i>IEEE Sensors Journal</i> , 2019 , 19, 1829-1838	4	4
99	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
98	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
97	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
96	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
95	Design of a rotary dielectric elastomer actuator using topology optimization method 2017 ,		3
94	Topology optimization of thermo-mechanical continuum structure 2010 ,		3

93	The superior mobility and function of W-Climbot A bio-inspired modular biped wall-climbing robot 2011 ,		3
92	1-DoF robotic joint modules and their applications in new robotic systems 2009 ,		3
91	High-Quality Computational Ghost Imaging Using an Optimum Distance Search Method. <i>IEEE Photonics Journal</i> , 2016 , 8, 1-9	1.8	3
90	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
89	Motion measurement system of compliant mechanisms using computer micro-vision. <i>Optics Express</i> , 2021 , 29, 5006-5017	3.3	3
88	An Approach for Geometrically Nonlinear Topology Optimization Using Moving Wide-Band Components With Constrained Ends. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2022 , 144,	3	3
87	Strain-based multimode integrating sensing for a bridge-type compliant amplifier. <i>Measurement Science and Technology</i> , 2019 , 30, 105106	2	2
86	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
85	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
84	Topology Optimization of Distributed Compliant Mechanisms 2018 , 81-119		2
83	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
82	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
81	Design and test of a novel planar 3-DOF precision positioning platform with a large magnification 2014 ,		2
80	2017 ,		2
79	Peg-in-hole assembly based on hybrid vision/force guidance and dual-arm coordination 2017 ,		2
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61	Strain-based output/input sensing cell integrated within a compliant bridge-type mechanism 2016 ,		1
60	Multi-material topology optimization of complaint mechanism using ground structure approach 2014 ,		1
59	Leaf flexure hinge with damping layers: Theoretical model and experiments 2014 ,		1
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55	Closed-Form Equations of Mass Matrix of the Single-Axis Right Circular Flexure Hinge 2009 ,		1
54	Reliability-based topology optimization of continuous structures 2008 ,		1
53	An Integrated Inspection Method based on Machine Vision for Solder Paste Depositing 2007 ,		1
52	Wavelet-based interpolation algorithm for topology extraction of compliant mechanisms 2005 ,		1
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40	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

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