Hai Li

List of Publications by Year
in descending order

35 papers	685 citations	623734 14 h-index	552781 26 g-index
35 all docs	35 docs citations	35 times ranked	452 citing authors

#	Article	IF	Citations
1	Design of compliant mechanisms using continuum topology optimization: A review. Mechanism and Machine Theory, 2020, 143, 103622.	4.5	218
2	Nonlinear analysis and optimal design of a novel piezoelectric-driven compliant microgripper. Mechanism and Machine Theory, 2017, 118, 32-52.	4.5	54
3	Full closed-loop controls of micro/nano positioning system with nonlinear hysteresis using micro-vision system. Sensors and Actuators A: Physical, 2017, 257, 125-133.	4.1	44
4	Realtime in-plane displacements tracking of the precision positioning stage based on computer micro-vision. Mechanical Systems and Signal Processing, 2019, 124, 111-123.	8.0	34
5	Line-based calibration of a micro-vision motion measurement system. Optics and Lasers in Engineering, 2017, 93, 40-46.	3.8	30
6	A Review of Computer Microvision-Based Precision Motion Measurement: Principles, Characteristics, and Applications. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-28.	4.7	24
7	An 89-line code for geometrically nonlinear topology optimization written in FreeFEM. Structural and Multidisciplinary Optimization, 2021, 63, 1015-1027.	3.5	23
8	A monocular vision system for online pose measurement of a 3RRR planar parallel manipulator. Journal of Intelligent and Robotic Systems: Theory and Applications, 2018, 92, 3-17.	3.4	23
9	Displacement measurement system for inverters using computer micro-vision. Optics and Lasers in Engineering, 2016, 81, 113-118.	3.8	22
10	Pose Sensing and Servo Control of the Compliant Nanopositioners Based on Microscopic Vision. IEEE Transactions on Industrial Electronics, 2021, 68, 3324-3335.	7.9	22
11	Online Precise Motion Measurement of 3-DOF Nanopositioners Based on Image Correlation. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 782-790.	4.7	20
12	Design of Planar Large-Deflection Compliant Mechanisms With Decoupled Multi-Input-Output Using Topology Optimization. Journal of Mechanisms and Robotics, 2019, 11, .	2.2	16
13	Micro-motion detection of the 3-DOF precision positioning stage based on iterative optimized template matching. Applied Optics, 2017, 56, 9435.	1.8	15
14	High-precision displacement measurement method for three degrees of freedom-compliant mechanisms based on computer micro-vision. Applied Optics, 2016, 55, 2594.	2.1	14
15	Topological and Shape Optimization of Flexure Hinges for Designing Compliant Mechanisms Using the Level Set Method. Chinese Journal of Mechanical Engineering (English Edition), 2019, 32, .	3.7	14
16	A high accuracy algorithm of displacement measurement for a micro-positioning stage. AIP Advances, 2017, 7, .	1.3	12
17	Vision-based adaptive control of a 3-RRR parallel positioning system. Science China Technological Sciences, 2018, 61, 1253-1264.	4.0	12
18	A robust rotation-invariance displacement measurement method for a micro-/nano-positioning system. Measurement Science and Technology, 2018, 29, 055402.	2.6	11

#	Article	IF	Citations
19	Design and analysis of corrugated flexure-based lamina emergent spatial joints for symmetrical compliant kaleidocycles. Mechanism and Machine Theory, 2022, 167, 104525.	4.5	11
20	An Improved Template-Matching-Based Pose Tracking Method for Planar Nanopositioning Stages Using Enhanced Correlation Coefficient. IEEE Sensors Journal, 2020, 20, 6378-6387.	4.7	10
21	An Approach for Geometrically Nonlinear Topology Optimization Using Moving Wide-BÃ©zier Components With Constrained Ends. Journal of Mechanical Design, Transactions of the ASME, 2022, 144, .	2.9	10
22	A simplified focusing and astigmatism correction method for a scanning electron microscope. AIP Advances, 2018, 8, .	1.3	6
23	Laser direct printing of solder paste. AIP Advances, 2019, 9, 125306.	1.3	6
24	Design of compliant mechanisms: An explicit topology optimization method using end-constrained spline curves with variable width. Mechanism and Machine Theory, 2022, 171, 104713.	4.5	6
25	Adaptive differential correspondence imaging based on sorting technique. AIP Advances, 2017, 7, 045121.	1.3	5
26	A robust edge-based template matching algorithm for displacement measurement of compliant mechanisms under scanning electron microscope. Review of Scientific Instruments, 2021, 92, 033703.	1.3	5
27	Edge determination improvement of scanning electron microscope images by inpainting and anisotropic diffusion for measurement and analysis of microstructures. Measurement: Journal of the International Measurement Confederation, 2021, 176, 109217.	5.0	5
28	Motion measurement system of compliant mechanisms using computer micro-vision. Optics Express, 2021, 29, 5006.	3.4	4
29	High-Accuracy Calibration of a Visual Motion Measurement System for Planar 3-DOF Robots Using Gaussian Process. IEEE Sensors Journal, 2019, 19, 7659-7667.	4.7	3
30	A Phase Diagram-Based Stability Design Method for a Symmetrical Origami Waterbomb Base. Journal of Mechanical Design, Transactions of the ASME, 2022, 144, .	2.9	3
31	A three-step displacement measurement method for a 3-DOF macro-micro positioning stage. Review of Scientific Instruments, 2018, 89, 113701.	1.3	2
32	High-efficiency Transmission of Industrial Heterogeneous Data in a Typical Mobile Phone Assembly Production Line. , 2022, , .		1
33	A robust block matching algorithm for motionestimation using an anti-interference similaritycriterion and the bilateral optimization scheme. Applied Optics, 2021, 60, 4746-4754.	1.8	0
34	Design of Flexure Hinges Using Geometrically Nonlinear Topology Optimization. Lecture Notes in Computer Science, 2021, , 179-189.	1.3	0
35	Corrections to â€œHigh-Accuracy Calibration of a Visual Motion Measurement System for Planar 3-DOF Robots Using Gaussian Processâ€• IEEE Sensors Journal, 2019, 19, 12510-12510.	4.7	0