

# Bijan Shirinzadeh

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11066127/publications.pdf>

Version: 2024-02-01

216  
papers

10,141  
citations

50170

46  
h-index

37111

96  
g-index

216  
all docs

216  
docs citations

216  
times ranked

8369  
citing authors

#	ARTICLE	IF	CITATIONS
1	Continuous finite-time control for robotic manipulators with terminal sliding mode. <i>Automatica</i> , 2005, 41, 1957-1964.	3.0	2,178
2	A wearable and highly sensitive pressure sensor with ultrathin gold nanowires. <i>Nature Communications</i> , 2014, 5, 3132.	5.8	1,731
3	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.	3.7	213
4	Development and dynamic modelling of a flexure-based Scottâ€“Russell mechanism for nano-manipulation. <i>Mechanical Systems and Signal Processing</i> , 2009, 23, 957-978.	4.4	182
5	A systematic technique to estimate positioning errors for robot accuracy improvement using laser interferometry based sensing. <i>Mechanism and Machine Theory</i> , 2005, 40, 879-906.	2.7	171
6	Development of a novel flexure-based microgripper for high precision micro-object manipulation. <i>Sensors and Actuators A: Physical</i> , 2009, 150, 257-266.	2.0	147
7	Multi-sensor optimal data fusion for INS/GPS/SAR integrated navigation system. <i>Aerospace Science and Technology</i> , 2009, 13, 232-237.	2.5	139
8	Design and analysis of a novel flexure-based 3-DOF mechanism. <i>Mechanism and Machine Theory</i> , 2014, 74, 173-187.	2.7	138
9	Nanorobot architecture for medical target identification. <i>Nanotechnology</i> , 2008, 19, 015103.	1.3	133
10	Enhanced sliding mode motion tracking control of piezoelectric actuators. <i>Sensors and Actuators A: Physical</i> , 2007, 138, 194-202.	2.0	132
11	Design and Computational Optimization of a Decoupled 2-DOF Monolithic Mechanism. <i>IEEE/ASME Transactions on Mechatronics</i> , 2014, 19, 872-881.	3.7	126
12	Robust motion tracking control of piezo-driven flexure-based four-bar mechanism for micro/nano manipulation. <i>Mechatronics</i> , 2008, 18, 111-120.	2.0	124
13	An evaluation of surface roughness parameters measurement using vision-based data. <i>International Journal of Machine Tools and Manufacture</i> , 2007, 47, 697-708.	6.2	117
14	Development of a high precision flexure-based microgripper. <i>Precision Engineering</i> , 2009, 33, 362-370.	1.8	115
15	A new design of piezoelectric driven compliant-based microgripper for micromanipulation. <i>Mechanism and Machine Theory</i> , 2009, 44, 2248-2264.	2.7	108
16	Robust Adaptive Constrained Motion Tracking Control of Piezo-Actuated Flexure-Based Mechanisms for Micro/Nano Manipulation. <i>IEEE Transactions on Industrial Electronics</i> , 2011, 58, 1406-1415.	5.2	108
17	Sliding-Mode Enhanced Adaptive Motion Tracking Control of Piezoelectric Actuation Systems for Micro/Nano Manipulation. <i>IEEE Transactions on Control Systems Technology</i> , 2008, 16, 826-833.	3.2	106
18	Nanorobot for Brain Aneurysm. <i>International Journal of Robotics Research</i> , 2009, 28, 558-570.	5.8	99

#	ARTICLE	IF	CITATIONS
19	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.	2.0	97
20	Nanorobot Hardware Architecture for Medical Defense. <i>Sensors</i> , 2008, 8, 2932-2958.	2.1	96
21	Topology optimisation and singularity analysis of a 3-SPS parallel manipulator with a passive constraining spherical joint. <i>Mechanism and Machine Theory</i> , 2004, 39, 215-235.	2.7	91
22	The measurement uncertainties in the laser interferometry-based sensing and tracking technique. <i>Measurement: Journal of the International Measurement Confederation</i> , 2002, 32, 135-150.	2.5	85
23	Trajectory generation for open-contoured structures in robotic fibre placement. <i>Robotics and Computer-Integrated Manufacturing</i> , 2007, 23, 380-394.	6.1	84
24	Fabrication process of open surfaces by robotic fibre placement. <i>Robotics and Computer-Integrated Manufacturing</i> , 2004, 20, 17-28.	6.1	82
25	Development of a piezo-driven 3-DOF stage with T-shape flexible hinge mechanism. <i>Robotics and Computer-Integrated Manufacturing</i> , 2016, 37, 125-138.	6.1	82
26	Neural Network Motion Tracking Control of Piezo-Actuated Flexure-Based Mechanisms for Micro-/Nanomanipulation. <i>IEEE/ASME Transactions on Mechatronics</i> , 2009, 14, 517-527.	3.7	80
27	Robust generalised impedance control of piezo-actuated flexure-based four-bar mechanisms for micro/nano manipulation. <i>Sensors and Actuators A: Physical</i> , 2008, 148, 443-453.	2.0	79
28	Design and Kinematics Modeling of a Novel 3-DOF Monolithic Manipulator Featuring Improved Scott-Russell Mechanisms. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2013, 135, .	1.7	77
29	Medical nanorobotics for diabetes control. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2008, 4, 127-138.	1.7	76
30	Modeling and controller design of a 6-DOF precision positioning system. <i>Mechanical Systems and Signal Processing</i> , 2018, 104, 536-555.	4.4	75
31	Nonlinear Double-Integral Observer and Application to Quadrotor Aircraft. <i>IEEE Transactions on Industrial Electronics</i> , 2015, 62, 1189-1200.	5.2	72
32	Robotic fiber placement process analysis and optimization using response surface method. <i>International Journal of Advanced Manufacturing Technology</i> , 2011, 55, 393-404.	1.5	69
33	Design and control of a 6-degree-of-freedom precision positioning system. <i>Robotics and Computer-Integrated Manufacturing</i> , 2017, 44, 77-96.	6.1	68
34	Robust Neural Network Motion Tracking Control of Piezoelectric Actuation Systems for Micro/Nanomanipulation. <i>IEEE Transactions on Neural Networks</i> , 2009, 20, 356-367.	4.8	67
35	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.	3.7	65
36	Development of a 4-DOF haptic micromanipulator utilizing a hybrid parallel-serial flexure mechanism. <i>Mechatronics</i> , 2018, 50, 55-68.	2.0	62

#	ARTICLE	IF	CITATIONS
37	Prediction of geometric errors of robot manipulators with Particle Swarm Optimisation method. <i>Robotics and Autonomous Systems</i> , 2006, 54, 956-966.	3.0	59
38	Enhanced adaptive motion tracking control of piezo-actuated flexure-based four-bar mechanisms for micro/nano manipulation. <i>Sensors and Actuators A: Physical</i> , 2008, 147, 254-262.	2.0	59
39	Physics-Based Haptic Simulation of Bone Machining. <i>IEEE Transactions on Haptics</i> , 2011, 4, 39-50.	1.8	59
40	Optimum synthesis of planar parallel manipulators based on kinematic isotropy and force balancing. <i>Robotica</i> , 2004, 22, 97-108.	1.3	57
41	Development and control of a two DOF linear-angular precision positioning stage. <i>Mechatronics</i> , 2015, 32, 34-43.	2.0	56
42	Laser-interferometry-based tracking for dynamic measurements. <i>Industrial Robot</i> , 1998, 25, 35-41.	1.2	55
43	Optimum dynamic balancing of planar parallel manipulators based on sensitivity analysis. <i>Mechanism and Machine Theory</i> , 2006, 41, 1520-1532.	2.7	55
44	Design and analysis of a compact flexure-based precision pure rotation stage without actuator redundancy. <i>Mechanism and Machine Theory</i> , 2016, 105, 129-144.	2.7	50
45	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.	3.4	48
46	Laser-Based Sensing, Measurement, and Misalignment Control of Coupled Linear and Angular Motion for Ultrahigh Precision Movement. <i>IEEE/ASME Transactions on Mechatronics</i> , 2015, 20, 84-92.	3.7	48
47	Vision-based force measurement using neural networks for biological cell microinjection. <i>Journal of Biomechanics</i> , 2014, 47, 1157-1163.	0.9	47
48	Topology optimisation of bridge input structures with maximal amplification for design of flexure mechanisms. <i>Mechanism and Machine Theory</i> , 2018, 122, 113-131.	2.7	45
49	Issues in the design of the reconfigurable fixture modules for robotic assembly. <i>Journal of Manufacturing Systems</i> , 1993, 12, 1-14.	7.6	42
50	Motion control analysis of a parallel robot assisted minimally invasive surgery/microsurgery system (PRAMiSS). <i>Robotics and Computer-Integrated Manufacturing</i> , 2013, 29, 318-327.	6.1	42
51	An actuated force feedback-enabled laparoscopic instrument for robotic-assisted surgery. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2014, 10, 11-21.	1.2	42
52	High-order nonlinear differentiator and application to aircraft control. <i>Mechanical Systems and Signal Processing</i> , 2014, 46, 227-252.	4.4	42
53	Nanorobot Communication Techniques: A Comprehensive Tutorial. , 2006, , .		41
54	Medical Nanorobot Architecture Based on Nanobioelectronics. <i>Recent Patents on Nanotechnology</i> , 2007, 1, 1-10.	0.7	41

#	ARTICLE	IF	CITATIONS
55	Random weighting estimation for fusion of multi-dimensional position data. <i>Information Sciences</i> , 2010, 180, 4999-5007.	4.0	41
56	Development of Piezo-Driven Compliant Bridge Mechanisms: General Analytical Equations and Optimization of Displacement Amplification. <i>Micromachines</i> , 2017, 8, 238.	1.4	41
57	Robotic fibre placement process planning and control. <i>Assembly Automation</i> , 2000, 20, 313-320.	1.0	40
58	Flexible fixturing for workpiece positioning and constraining. <i>Assembly Automation</i> , 2002, 22, 112-120.	1.0	38
59	Nonlinear augmented observer design and application to quadrotor aircraft. <i>Nonlinear Dynamics</i> , 2015, 80, 1463-1481.	2.7	38
60	Design, development and analysis of a haptic-enabled modular flexure-based manipulator. <i>Mechatronics</i> , 2016, 40, 156-166.	2.0	38
61	Development of a Passive Compliant Mechanism for Measurement of Micro/Nanoscale Planar 3-DOF Motions. <i>IEEE/ASME Transactions on Mechatronics</i> , 2016, 21, 1222-1232.	3.7	38
62	Topology optimization of stiffness constrained flexure-hinges for precision and range maximization. <i>Mechanism and Machine Theory</i> , 2020, 150, 103874.	2.7	36
63	Compliance modeling and analysis of statically indeterminate symmetric flexure structures. <i>Precision Engineering</i> , 2013, 37, 415-424.	1.8	35
64	Flexible and automated workholding systems. <i>Industrial Robot</i> , 1995, 22, 29-34.	1.2	34
65	Feasibility assessment of vision-based surface roughness parameters acquisition for different types of machined specimens. <i>Image and Vision Computing</i> , 2009, 27, 444-458.	2.7	33
66	Constrained Motion Tracking Control of Piezo-Actuated Flexure-Based Four-Bar Mechanisms for Micro/Nano Manipulation. <i>IEEE Transactions on Automation Science and Engineering</i> , 2010, 7, 699-705.	3.4	33
67	Effects of realistic force feedback in a robotic assisted minimally invasive surgery system. <i>Minimally Invasive Therapy and Allied Technologies</i> , 2014, 23, 127-135.	0.6	33
68	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.	6.1	33
69	Design, analysis and experimental investigations of a high precision flexure-based microgripper for micro/nano manipulation. <i>Mechatronics</i> , 2020, 69, 102396.	2.0	33
70	Adaptive Fuzzy Sliding Mode Control for High-Precision Motion Tracking of a Multi-DOF Micro/Nano Manipulator. <i>IEEE Robotics and Automation Letters</i> , 2020, 5, 4313-4320.	3.3	32
71	A fuzzy disturbance observer based control approach for a novel 1-DOF micropositioning mechanism. <i>Mechatronics</i> , 2020, 65, 102317.	2.0	31
72	Design, modeling, and control of a large range 3-DOF micropositioning stage. <i>Mechanism and Machine Theory</i> , 2021, 156, 104159.	2.7	30

#	ARTICLE	IF	CITATIONS
73	Multi-pass layup process for thermoplastic composites using robotic fiber placement. <i>Robotics and Computer-Integrated Manufacturing</i> , 2018, 49, 277-284.	6.1	29
74	Development of a XYZ scanner for home-made atomic force microscope based on FPAA control. <i>Mechanical Systems and Signal Processing</i> , 2019, 131, 222-242.	4.4	29
75	Development and control of a large range XY $\hat{z}$ micropositioning stage. <i>Mechatronics</i> , 2020, 66, 102343.	2.0	29
76	Design, analysis, and experimental investigation of a single-stage and low parasitic motion piezoelectric actuated microgripper. <i>Smart Materials and Structures</i> , 2020, 29, 045028.	1.8	28
77	System Identification-Based Sliding Mode Control for Small-Scaled Autonomous Aerial Vehicles With Unknown Aerodynamics Derivatives. <i>IEEE/ASME Transactions on Mechatronics</i> , 2016, 21, 2944-2952.	3.7	27
78	A novel compliant piezoelectric actuated symmetric microgripper for the parasitic motion compensation. <i>Mechanism and Machine Theory</i> , 2021, 155, 104069.	2.7	27
79	A hybrid contact state analysis methodology for robotic-based adjustment of cylindrical pair. <i>International Journal of Advanced Manufacturing Technology</i> , 2011, 52, 329-342.	1.5	25
80	Rapid-convergent nonlinear differentiator. <i>Mechanical Systems and Signal Processing</i> , 2012, 28, 414-431.	4.4	25
81	Development of novel hybrid flexure-based microgrippers for precision micro-object manipulation. <i>Review of Scientific Instruments</i> , 2009, 80, 065106.	0.6	24
82	A Cellular Neural Network Methodology for Deformable Object Simulation. <i>IEEE Transactions on Information Technology in Biomedicine</i> , 2006, 10, 749-762.	3.6	23
83	Nonlinear Multiple Integrator and Application to Aircraft Navigation. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2014, 50, 607-622.	2.6	23
84	Topology optimization of leaf flexures to maximize in-plane to out-of-plane compliance ratio. <i>Precision Engineering</i> , 2019, 55, 397-407.	1.8	21
85	Computational parametric analysis and experimental investigations of a compact flexure-based microgripper. <i>Precision Engineering</i> , 2020, 66, 363-373.	1.8	21
86	Closed-form compliance equations for elliptic-revolute notch type multiple-axis flexure hinges. <i>Mechanism and Machine Theory</i> , 2021, 156, 104154.	2.7	21
87	Soft tissue deformation with reaction-diffusion process for surgery simulation. <i>Journal of Visual Languages and Computing</i> , 2012, 23, 1-12.	1.8	19
88	An XYZ micromanipulator for precise positioning applications. <i>Journal of Micro-Bio Robotics</i> , 2020, 16, 53-63.	2.1	19
89	Modeling and a cross-coupling compensation control methodology of a large range 3-DOF micropositioner with low parasitic motions. <i>Mechanism and Machine Theory</i> , 2021, 162, 104334.	2.7	19
90	An autowave based methodology for deformable object simulation. <i>CAD Computer Aided Design</i> , 2006, 38, 740-754.	1.4	18

#	ARTICLE	IF	CITATIONS
91	Analytical modelling and experiments for hybrid multiaxis flexure hinges. Precision Engineering, 2022, 76, 294-304.	1.8	18
92	A CAD-Based hierarchical approach to interference detection among fixture modules in a reconfigurable fixturing system. Robotics and Computer-Integrated Manufacturing, 1996, 12, 41-53.	6.1	17
93	Dynamic analysis of reconfigurable fixture construction by a manipulator. Robotics and Computer-Integrated Manufacturing, 2001, 17, 367-377.	6.1	16
94	Hardware architecture for nanorobot application in cerebral aneurysm. , 2007, , .		16
95	Soft tissue modelling through autowaves for surgery simulation. Medical and Biological Engineering and Computing, 2006, 44, 805-821.	1.6	15
96	Remote centre-of-motion control algorithms of 6-RRR parallel robot assisted surgery system (PRAMISS). , 2012, , .		15
97	Experimental investigation of the performance of a reconfigurable fixturing system. International Journal of Advanced Manufacturing Technology, 1995, 10, 330-341.	1.5	14
98	Direct Kinematics and Analytical Solution to 3RRR Parallel Planar Mechanisms. , 2006, , .		14
99	Nanorobots for Laparoscopic Cancer Surgery. , 2007, , .		14
100	A Vision-Based Methodology to Dynamically Track and Describe Cell Deformation during Cell Micromanipulation. International Journal of Optomechatronics, 2013, 7, 33-45.	3.3	14
101	Design, modelling and characterization of a 2-DOF precision positioning platform. Transactions of the Institute of Measurement and Control, 2015, 37, 396-405.	1.1	14
102	Characterization of a compact piezoelectric actuated microgripper based on double-stair bridge-type mechanism. Journal of Micro-Bio Robotics, 2020, 16, 79-92.	2.1	14
103	A mathematical model for a pneumatically actuated robotic fibre placement system. Robotica, 2002, 20, 545-551.	1.3	13
104	An electromechanical based deformable model for soft tissue simulation. Artificial Intelligence in Medicine, 2009, 47, 275-288.	3.8	13
105	Soft tissue modelling with conical springs. Bio-Medical Materials and Engineering, 2015, 26, S207-S214.	0.4	13
106	Experimental Analysis of Variable Collective-pitch Rotor Systems for Multirotor Helicopter Applications. Journal of Intelligent and Robotic Systems: Theory and Applications, 2016, 83, 271-288.	2.0	13
107	Improved uniform degree of multi-layer interlaminar bonding strength for composite laminate. Journal of Reinforced Plastics and Composites, 2017, 36, 1211-1224.	1.6	13
108	Design of a XYZ scanner for home-made high-speed atomic force microscopy. Microsystem Technologies, 2018, 24, 3123-3132.	1.2	13

#	ARTICLE	IF	CITATIONS
109	Parametric optimization for multi-layered filament-wound cylinder based on hybrid method of GA-PSO coupled with local sensitivity analysis. <i>Composite Structures</i> , 2021, 267, 113861.	3.1	13
110	Solid modelling in a virtual reality environment. <i>Visual Computer</i> , 2005, 21, 17-40.	2.5	12
111	Enhancing Solid State LiDAR Mapping with a 2D Spinning LiDAR in Urban Scenario SLAM on Ground Vehicles. <i>Sensors</i> , 2021, 21, 1773.	2.1	12
112	Kinematics Analysis of 6-DOF Parallel Micro-Manipulators with Offset U-Joints. <i>International Journal of Intelligent Mechatronics and Robotics</i> , 2012, 2, 28-40.	0.4	11
113	Modeling and tracking control of a novel $XY\hat{z}$ stage. <i>Microsystem Technologies</i> , 2017, 23, 3575-3588.	1.2	11
114	Modeling and prototype experiment of a monolithic 3-PUU parallel micromanipulator with nano-scale accuracy. <i>Smart Materials and Structures</i> , 2020, 29, 075023.	1.8	11
115	An approach for damage initiation and propagation in metal and carbon fiber hybrid composites manufactured by robotic fiber placement. <i>Composite Structures</i> , 2021, 268, 113976.	3.1	11
116	Design and evaluation of a dual-stage, compensated stick-slip actuator for long-range, precision compliant mechanisms. <i>Sensors and Actuators A: Physical</i> , 2021, 331, 113007.	2.0	11
117	Development of a Compliant-Based Microgripper for Microassembly. , 2008, , .		10
118	Design of a novel parallel monolithic 6-DOF compliant micromanipulation mechanism. , 2018, , .		10
119	Study of the hinge thickness deviation for a 316L parallelogram flexure mechanism fabricated via selective laser melting. <i>Journal of Intelligent Manufacturing</i> , 2021, 32, 1411-1420.	4.4	10
120	Strategies for planning and implementation of flexible fixturing systems in a computer integrated manufacturing environment. <i>Computers in Industry</i> , 1996, 30, 175-183.	5.7	9
121	Intelligent robotic fettling using a visual feedback technique and force sensing. <i>International Journal of Advanced Manufacturing Technology</i> , 2004, 24, 607-614.	1.5	9
122	Computational Nanomechanics: A Pathway for Control and Manufacturing Nanorobots. , 2006, , .		9
123	Simulation of deformable models with the Poisson equation. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2006, 9, 289-304.	0.9	9
124	A vision-based measurement algorithm for micro/nano manipulation. , 2013, , .		9
125	The bounds on tracking performance utilising a laser-based linear and angular sensing and measurement methodology for micro/nano manipulation. <i>Measurement Science and Technology</i> , 2014, 25, 125005.	1.4	9
126	Nonlinear continuous integral-derivative observer. <i>Nonlinear Dynamics</i> , 2014, 77, 793-806.	2.7	9



#	ARTICLE	IF	CITATIONS
127	Swing-Up and Stability Control of Wheeled Acrobot (WAcrobot). <i>Automatika</i> , 2014, 55, 32-40.	1.2	8
128	Modeling of two-plate capacitive position sensing systems for high precision planar three DOF measurement. <i>Precision Engineering</i> , 2016, 46, 383-392.	1.8	8
129	Antlion Optimized Robust Control Approach for Micropositioning Trajectory Tracking Tasks. <i>IEEE Access</i> , 2020, 8, 220889-220907.	2.6	8
130	Vibration analysis of a rotating cantilever double-tapered AFGM nanobeam. <i>Microsystem Technologies</i> , 2020, 26, 3657-3676.	1.2	8
131	Inverse kinematics Analysis of 6-RRCRR parallel manipulators. , 2013, , .		7
132	Vision-based robot-assisted biological cell micromanipulation. , 2014, , .		7
133	Pose estimation and calibration using nonlinear capacitance sensor models for micro/nano positioning. <i>Sensors and Actuators A: Physical</i> , 2017, 253, 118-130.	2.0	7
134	A Flexure-Based 2-DOF Microgripper for Handling Micro-Objects. , 2018, , .		7
135	Design and Analysis of a Novel 3-DOF Large Range Micropositioning Mechanism. , 2018, , .		7
136	Hector SLAM with ICP Trajectory Matching. , 2020, , .		7
137	Robust Adaptive Motion Tracking Control of Piezoelectric Actuation Systems for Micro/Nano Manipulation. <i>Proceedings - IEEE International Conference on Robotics and Automation</i> , 2007, , .	0.0	6
138	A new neural network for robot path planning. , 2008, , .		6
139	Design and optimization of a compact, large amplification XY flexure-mechanism. , 2017, , .		6
140	Closed-Form Modeling and Analysis of an XY Flexure-Based Nano-Manipulator. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2018, 31, .	1.9	6
141	Design of a novel parallel monolithic 3-DOF compliant micromanipulator. , 2019, , .		6
142	Feasibility Study of Robust Neural Network Motion Tracking Control of Piezoelectric Actuation Systems for Micro/Nano Manipulation. , 2007, , 5-19.		6
143	Experimental Study of Laser Interferometry Based Motion Tracking of a Flexure-Based Mechanism. <i>International Journal of Intelligent Mechatronics and Robotics</i> , 2011, 1, 31-45.	0.4	6
144	Evaluation of robotic fiber placement effect on <sc>processâ€induced</sc> residual stresses using incremental <sc>holeâ€drilling</sc> method. <i>Polymer Composites</i> , 2022, 43, 4417-4436.	2.3	6

#	ARTICLE	IF	CITATIONS
145	Development of a flexure-based 3-RRR parallel mechanism for nano-manipulation. , 2009, , .		5
146	Thermal-“Mechanical-Based Soft Tissue Deformation for Surgery Simulation. Advanced Robotics, 2010, 24, 1719-1739.	1.1	5
147	Random Weighting Estimation for Quantile Processes and Negatively Associated Samples. Communications in Statistics - Theory and Methods, 2014, 43, 656-662.	0.6	5
148	Laser interferometry measurements based calibration and error propagation identification for pose estimation in mobile robots. Robotica, 2014, 32, 165-174.	1.3	5
149	A Simple Weighing Method for Spherical Cells. Journal of the Association for Laboratory Automation, 2015, 20, 471-480.	2.8	5
150	Modeling of soft tissue thermal damage based on GPU acceleration. Computer Assisted Surgery, 2019, 24, 5-12.	0.6	5
151	Optimal Parameter Selection in Robotic Belt Polishing for Aeroengine Blade Based on GRA-RSM Method. Symmetry, 2019, 11, 1526.	1.1	5
152	Developing a Trajectory Planning for Curved-Contoured Surfaces for Use by 8-DoF Workcell in Robotic Fibre Placement. IOP Conference Series: Materials Science and Engineering, 2020, 859, 012018.	0.3	5
153	Sensing and Modelling Mechanical Response in Large Deformation Indentation of Adherent Cell Using Atomic Force Microscopy. Sensors, 2020, 20, 1764.	2.1	5
154	Experimental System Identification, Feed-Forward Control, and Hysteresis Compensation of a 2-DOF Mechanism. International Journal of Intelligent Mechatronics and Robotics, 2013, 3, 1-21.	0.4	5
155	Optimization of process-induced residual stresses in automated manufacturing of thermoset composites. Aerospace Science and Technology, 2022, 123, 107443.	2.5	5
156	A reaction-diffusion methodology for soft object simulation. , 2006, , .		4
157	A vision-based approach for surface roughness assessment at micro and nano scales. , 2008, , .		4
158	Development of a novel flexure based microgripper for precision manipulation of micro-objects. , 2009, , .		4
159	Modelling and Daisy Chaining Control Allocation of a Multirotor Helicopter with a Single Tilting Rotor. Electronics (Switzerland), 2016, 5, 81.	1.8	4
160	Topology optimization of leaf flexures for stiffness ratio maximization in compliant mechanisms. , 2018, , .		4
161	Orientation Correction for Hector SLAM at Starting Stage. , 2019, , .		4
162	FEA-based optimization of a complete structure of a monolithic z/tip/tilt micromanipulator. Journal of Micro-Bio Robotics, 2020, 16, 93-110.	2.1	4

#	ARTICLE	IF	CITATIONS
163	Towards fully-automated micrograsping for microassembly. , 2008, , .		3
164	Mobile Robot Navigation using alpha level fuzzy logic system: Experimental investigations. Conference Proceedings IEEE International Conference on Systems, Man, and Cybernetics, 2008, , .	0.0	3
165	Stiffness estimation of the flexure-based five-bar micro-manipulator. , 2008, , .		3
166	Performance evaluation of a flexure-based five-bar mechanism for micro/nano manipulation. , 2009, , .		3
167	Modelling a precision loadcell using neural networks for vision-based force measurement in cell micromanipulation. , 2013, , .		3
168	Design, development and analysis of a haptic-enabled modular flexure-based manipulator. , 2015, , .		3
169	Development and Analysis of a Novel Large Range Voice Coil Motor-driven 3-DOF XYÎ Micro-positioning Mechanism. , 2019, , .		3
170	On the Sensing and Calibration of Residual Stresses Measurements in the Incremental Hole-Drilling Method. Sensors, 2021, 21, 7447.	2.1	3
171	Modeling and Multiparametric Effect on Void Content in Composite Tape Winding. Arabian Journal for Science and Engineering, 2022, 47, 8663-8675.	1.7	3
172	A mechatronic wrist unit for precision tasks. Industrial Robot, 1997, 24, 446-451.	1.2	2
173	Assembly Modelling Through Constraint-based Manipulations in A Virtual Reality Environment. , 2005, , .		2
174	Robust Control Framework for Piezoelectric Actuation Systems in Micro/Nano Manipulation. , 2005, , .		2
175	Motion tracking control of piezo-driven flexure-based mechanism based on sliding mode strategy. , 2007, , .		2
176	Enhanced sliding-mode constrained motion tracking control of piezo-actuated flexure-based mechanisms. , 2009, , .		2
177	Surgical Slave with a Novel Method for Force Sensing and Trocar Friction Reduction. Advanced Materials Research, 0, 622-623, 1362-1367.	0.3	2
178	Modelling the indentation force response of non-uniform soft tissue using a recurrent neural network. , 2016, , .		2
179	Improved SP-MCTS-Based Scheduling for Multi-Constraint Hybrid Flow Shop. Applied Sciences (Switzerland), 2020, 10, 6220.	1.3	2
180	Multiparametric sensitivity analysis of multilayered filament-wound cylinder under internal pressure. Mechanics of Advanced Materials and Structures, 2020, , 1-12.	1.5	2

#	ARTICLE	IF	CITATIONS
181	Comparison of Attitude Determination Methodologies for Implementation with 9DOF, Low Cost Inertial Measurement Unit for Autonomous Aerial Vehicles. International Journal of Intelligent Mechatronics and Robotics, 2013, 3, 1-15.	0.4	2
182	The Role of Compaction Roller in Defining the Layup Quality and Laminate Porosity in Robotic Fiber Placement. , 2021, , .		2
183	Experimental Investigation of 2D Cylindrical Pair Height Adjustment in a Static Environment. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 623-628.	0.4	1
184	HAPTIC DEFORMATION SIMULATION WITH POISSON EQUATION. International Journal of Image and Graphics, 2006, 06, 445-473.	1.2	1
185	Adaptive Sliding Motion Tracking Control of Piezo-Driven Flexure-Based Mechanism. Control Applications (CCA), Proceedings of the IEEE International Conference on, 2007, , .	0.0	1
186	REACTION-DIFFUSION BASED DEFORMABLE OBJECT SIMULATION. International Journal of Image and Graphics, 2008, 08, 265-280.	1.2	1
187	An Improved Approach to Estimate Soft Tissue Parameters Using Genetic Algorithm for Minimally Invasive Measurement. , 2009, , .		1
188	Transverse vibration analyses of cantilevered boron nitride nanocones. Micro and Nano Letters, 2013, 8, 899-902.	0.6	1
189	Modularized design and development of a piezo-actuated translational manipulator. , 2014, , .		1
190	Pose estimation with capacitive sensors experiencing non-linear response to tilt. , 2014, , .		1
191	Sliding mode based laser-beam auto-alignment for laser interferometry-based localisation of multirotor helicopters. , 2015, , .		1
192	Laser interferometry-based tracking of multirotor helicopters. , 2015, , .		1
193	Development of a dexterous haptic micro/nanomanipulator utilizing a hybrid parallel-serial flexure mechanism. , 2016, , .		1
194	Nonlinear Deformations of Soft Tissues for Surgery Simulation. , 2016, , 281-296.		1
195	Design of a 3-DOF parallel mechanism for the enhancement of endonasal surgery. , 2017, , .		1
196	A hyperelastic model for mechanical responses of adherent cells in microinjection. , 2017, , .		1
197	Development of a cost-effective actuation unit for three DOF concentric tube robot in minimally invasive surgery. , 2019, , .		1
198	Forward Kinematics and Solution Methodologies for a Flexure-Based Micro-manipulator. Lecture Notes in Computer Science, 2008, , 250-259.	1.0	1

#	ARTICLE	IF	CITATIONS
199	Soft Tissue Characterisation Using a Force Feedback-Enabled Instrument for Robotic Assisted Minimally Invasive Surgery Systems. , 2014, , 473-484.		1
200	Experimental Evaluation of Adaptive and Variable Structure Control of Piezoelectric Actuation Systems for Micro/Nano Manipulation. , 2006, , .		0
201	Closed-form equations for the vibrations of a flexure-based Scott-Russell mechanism. , 2008, , .		0
202	Study of neural network motion control of piezoelectric actuation systems for micro/nano manipulation. , 2008, , .		0
203	Learning of biologically inspired behaviors for autonomous robots by a navigational network. , 2008, , .		0
204	Modeling and analysis of a new flexure-based micropositioner for precision manipulation. , 2009, , .		0
205	Modeling and design of a high precision microgripper for microhandling operation. , 2009, , .		0
206	An optimal parameter estimation method for soft tissue characterization. , 2010, , .		0
207	Dynamic analysis of a flexure-based mechanism for precision machining operation. , 2010, , .		0
208	Motion control of a 2-DOF decoupled compliant mechanism using H <sub>∞</sub> synthesis. , 2012, , .		0
209	Design, analysis, and experimental investigations of a 2-DOF monolithic parallel mechanism. , 2013, , .		0
210	Tissue characterization in medical robotics. , 2014, , .		0
211	An artificial neural network based haptic rendering of contact with deformable bodies. , 2016, , .		0
212	Development of an end-effector mounted tracking methodology for feedback control of high precision 3-DOF planar motions. , 2016, , .		0
213	A Parasitic Motionless Piezoelectric Actuated Microgripper for Micro/Nano Manipulation. , 2019, , .		0
214	Characterizing the Disruption of HEK-293 Cell Membrane in AFM-based Indentation Using Energy Limiter Method. , 2019, , .		0
215	A Hybrid Hysteresis and Dynamics Model for Piezo-Driven Flexure-Based Mechanisms. , 2019, , .		0
216	Experimental Study of Laser Interferometry Based Motion Tracking of a Flexure-Based Mechanism. , 0, , 165-178.		0