

Bijan Shirinzadeh

List of Publications by Year in descending order

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216
papers

10,141
citations

50276

46
h-index

37204

96
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216
all docs

216
docs citations

216
times ranked

8369
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling and Multiparametric Effect on Void Content in Composite Tape Winding. Arabian Journal for Science and Engineering, 2022, 47, 8663-8675.	3.0	3
2	Optimization of process-induced residual stresses in automated manufacturing of thermoset composites. Aerospace Science and Technology, 2022, 123, 107443.	4.8	5
3	Analytical modelling and experiments for hybrid multiaxis flexure hinges. Precision Engineering, 2022, 76, 294-304.	3.4	18
4	Evaluation of robotic fiber placement effect on process-induced residual stresses using incremental hole-drilling method. Polymer Composites, 2022, 43, 4417-4436.	4.6	6
5	Study of the hinge thickness deviation for a 316L parallelogram flexure mechanism fabricated via selective laser melting. Journal of Intelligent Manufacturing, 2021, 32, 1411-1420.	7.3	10
6	Closed-form compliance equations for elliptic-revolute notch type multiple-axis flexure hinges. Mechanism and Machine Theory, 2021, 156, 104154.	4.5	21
7	Design, modeling, and control of a large range 3-DOF micropositioning stage. Mechanism and Machine Theory, 2021, 156, 104159.	4.5	30
8	A novel compliant piezoelectric actuated symmetric microgripper for the parasitic motion compensation. Mechanism and Machine Theory, 2021, 155, 104069.	4.5	27
9	Enhancing Solid State LiDAR Mapping with a 2D Spinning LiDAR in Urban Scenario SLAM on Ground Vehicles. Sensors, 2021, 21, 1773.	3.8	12
10	Parametric optimization for multi-layered filament-wound cylinder based on hybrid method of GA-PSO coupled with local sensitivity analysis. Composite Structures, 2021, 267, 113861.	5.8	13
11	An approach for damage initiation and propagation in metal and carbon fiber hybrid composites manufactured by robotic fiber placement. Composite Structures, 2021, 268, 113976.	5.8	11
12	Modeling and a cross-coupling compensation control methodology of a large range 3-DOF micropositioner with low parasitic motions. Mechanism and Machine Theory, 2021, 162, 104334.	4.5	19
13	Design and evaluation of a dual-stage, compensated stick-slip actuator for long-range, precision compliant mechanisms. Sensors and Actuators A: Physical, 2021, 331, 113007.	4.1	11
14	On the Sensing and Calibration of Residual Stresses Measurements in the Incremental Hole-Drilling Method. Sensors, 2021, 21, 7447.	3.8	3
15	The Role of Compaction Roller in Defining the Layup Quality and Laminate Porosity in Robotic Fiber Placement. , 2021, , .		2
16	A fuzzy disturbance observer based control approach for a novel 1-DOF micropositioning mechanism. Mechatronics, 2020, 65, 102317.	3.3	31
17	Improved SP-MCTS-Based Scheduling for Multi-Constraint Hybrid Flow Shop. Applied Sciences (Switzerland), 2020, 10, 6220.	2.5	2
18	Computational parametric analysis and experimental investigations of a compact flexure-based microgripper. Precision Engineering, 2020, 66, 363-373.	3.4	21

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19	Hector SLAM with ICP Trajectory Matching. , 2020, , .		7
20	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.	0.6	5
21	Multiparametric sensitivity analysis of multilayered filament-wound cylinder under internal pressure. Mechanics of Advanced Materials and Structures, 2020, , 1-12.	2.6	2
22	Antlion Optimized Robust Control Approach for Micropositioning Trajectory Tracking Tasks. IEEE Access, 2020, 8, 220889-220907.	4.2	8
23	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
24	Sensing and Modelling Mechanical Response in Large Deformation Indentation of Adherent Cell Using Atomic Force Microscopy. Sensors, 2020, 20, 1764.	3.8	5
25	Design, analysis and experimental investigations of a high precision flexure-based microgripper for micro/nano manipulation. Mechatronics, 2020, 69, 102396.	3.3	33
26	An XYZ micromanipulator for precise positioning applications. Journal of Micro-Bio Robotics, 2020, 16, 53-63.	2.1	19
27	Development and control of a large range XY ^z micropositioning stage. Mechatronics, 2020, 66, 102343.	3.3	29
28	Design, analysis, and experimental investigation of a single-stage and low parasitic motion piezoelectric actuated microgripper. Smart Materials and Structures, 2020, 29, 045028.	3.5	28
29	Topology optimization of stiffness constrained flexure-hinges for precision and range maximization. Mechanism and Machine Theory, 2020, 150, 103874.	4.5	36
30	Vibration analysis of a rotating cantilever double-tapered AFGM nanobeam. Microsystem Technologies, 2020, 26, 3657-3676.	2.0	8
31	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
32	Modeling and prototype experiment of a monolithic 3-PUU parallel micromanipulator with nano-scale accuracy. Smart Materials and Structures, 2020, 29, 075023.	3.5	11
33	Adaptive Fuzzy Sliding Mode Control for High-Precision Motion Tracking of a Multi-DOF Micro/Nano Manipulator. IEEE Robotics and Automation Letters, 2020, 5, 4313-4320.	5.1	32
34	Modeling of soft tissue thermal damage based on GPU acceleration. Computer Assisted Surgery, 2019, 24, 5-12.	1.3	5
35	A Parasitic Motionless Piezoelectric Actuated Microgripper for Micro/Nano Manipulation. , 2019, , .		0
36	Development and Analysis of a Novel Large Range Voice Coil Motor-driven 3-DOF XY ^z Micro-positioning Mechanism. , 2019, , .		3

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37	Design of a novel parallel monolithic 3-DOF compliant micromanipulator. , 2019, , .		6
38	Development of a cost-effective actuation unit for three DOF concentric tube robot in minimally invasive surgery. , 2019, , .		1
39	Development of a XYZ scanner for home-made atomic force microscope based on FPAA control. Mechanical Systems and Signal Processing, 2019, 131, 222-242.	8.0	29
40	Optimal Parameter Selection in Robotic Belt Polishing for Aeroengine Blade Based on GRA-RSM Method. Symmetry, 2019, 11, 1526.	2.2	5
41	Characterizing the Disruption of HEK-293 Cell Membrane in AFM-based Indentation Using Energy Limiter Method. , 2019, , .		0
42	A Hybrid Hysteresis and Dynamics Model for Piezo-Driven Flexure-Based Mechanisms. , 2019, , .		0
43	Orientation Correction for Hector SLAM at Starting Stage. , 2019, , .		4
44	Development and control methodologies for 2-DOF micro/nano positioning stage with high out-of-plane payload capacity. Robotics and Computer-Integrated Manufacturing, 2019, 56, 95-105.	9.9	33
45	Topology optimization of leaf flexures to maximize in-plane to out-of-plane compliance ratio. Precision Engineering, 2019, 55, 397-407.	3.4	21
46	Development of a 4-DOF haptic micromanipulator utilizing a hybrid parallel-serial flexure mechanism. Mechatronics, 2018, 50, 55-68.	3.3	62
47	Design of a XYZ scanner for home-made high-speed atomic force microscopy. Microsystem Technologies, 2018, 24, 3123-3132.	2.0	13
48	Topology optimisation of bridge input structures with maximal amplification for design of flexure mechanisms. Mechanism and Machine Theory, 2018, 122, 113-131.	4.5	45
49	Closed-Form Modeling and Analysis of an XY Flexure-Based Nano-Manipulator. Chinese Journal of Mechanical Engineering (English Edition), 2018, 31, .	3.7	6
50	Modeling and controller design of a 6-DOF precision positioning system. Mechanical Systems and Signal Processing, 2018, 104, 536-555.	8.0	75
51	Multi-pass layup process for thermoplastic composites using robotic fiber placement. Robotics and Computer-Integrated Manufacturing, 2018, 49, 277-284.	9.9	29
52	A Flexure-Based 2-DOF Microgripper for Handling Micro-Objects. , 2018, , .		7
53	Design and Analysis of a Novel 3-DOF Large Range Micropositioning Mechanism. , 2018, , .		7
54	Design of a novel parallel monolithic 6-DOF compliant micromanipulation mechanism. , 2018, , .		10

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55	Topology optimization of leaf flexures for stiffness ratio maximization in compliant mechanisms. , 2018, , .		4
56	Modeling and tracking control of a novel XYẏz stage. <i>Microsystem Technologies</i> , 2017, 23, 3575-3588.	2.0	11
57	Improved uniform degree of multi-layer interlaminar bonding strength for composite laminate. <i>Journal of Reinforced Plastics and Composites</i> , 2017, 36, 1211-1224.	3.1	13
58	Design and optimization of a compact, large amplification XY flexure-mechanism. , 2017, , .		6
59	Design and control of a 6-degree-of-freedom precision positioning system. <i>Robotics and Computer-Integrated Manufacturing</i> , 2017, 44, 77-96.	9.9	68
60	Pose estimation and calibration using nonlinear capacitance sensor models for micro/nano positioning. <i>Sensors and Actuators A: Physical</i> , 2017, 253, 118-130.	4.1	7
61	Design of a 3-DOF parallel mechanism for the enhancement of endonasal surgery. , 2017, , .		1
62	Development of Piezo-Driven Compliant Bridge Mechanisms: General Analytical Equations and Optimization of Displacement Amplification. <i>Micromachines</i> , 2017, 8, 238.	2.9	41
63	A hyperelastic model for mechanical responses of adherent cells in microinjection. , 2017, , .		1
64	Modelling and Daisy Chaining Control Allocation of a Multirotor Helicopter with a Single Tilting Rotor. <i>Electronics (Switzerland)</i> , 2016, 5, 81.	3.1	4
65	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.	4.5	50
66	Modelling the indentation force response of non-uniform soft tissue using a recurrent neural network. , 2016, , .		2
67	Design, development and analysis of a haptic-enabled modular flexure-based manipulator. <i>Mechatronics</i> , 2016, 40, 156-166.	3.3	38
68	An artificial neural network based haptic rendering of contact with deformable bodies. , 2016, , .		0
69	Development of a dexterous haptic micro/nanomanipulator utilizing a hybrid parallel-serial flexure mechanism. , 2016, , .		1
70	Development of an end-effector mounted tracking methodology for feedback control of high precision 3-DOF planar motions. , 2016, , .		0
71	Modeling of two-plate capacitive position sensing systems for high precision planar three DOF measurement. <i>Precision Engineering</i> , 2016, 46, 383-392.	3.4	8
72	Experimental Analysis of Variable Collective-pitch Rotor Systems for Multirotor Helicopter Applications. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2016, 83, 271-288.	3.4	13

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73	Nonlinear Deformations of Soft Tissues for Surgery Simulation. , 2016, , 281-296.		1
74	System Identification-Based Sliding Mode Control for Small-Scaled Autonomous Aerial Vehicles With Unknown Aerodynamics Derivatives. IEEE/ASME Transactions on Mechatronics, 2016, 21, 2944-2952.	5.8	27
75	Development of a Passive Compliant Mechanism for Measurement of Micro/Nanoscale Planar 3-DOF Motions. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1222-1232.	5.8	38
76	Development of a piezo-driven 3-DOF stage with T-shape flexible hinge mechanism. Robotics and Computer-Integrated Manufacturing, 2016, 37, 125-138.	9.9	82
77	Soft tissue modelling with conical springs. Bio-Medical Materials and Engineering, 2015, 26, S207-S214.	0.6	13
78	Design, development and analysis of a haptic-enabled modular flexure-based manipulator. , 2015, , .		3
79	Sliding mode based laser-beam auto-alignment for laser interferometry-based localisation of multirotor helicopters. , 2015, , .		1
80	Development and control of a two DOF linear angular precision positioning stage. Mechatronics, 2015, 32, 34-43.	3.3	56
81	Laser interferometry-based tracking of multirotor helicopters. , 2015, , .		1
82	Nonlinear augmented observer design and application to quadrotor aircraft. Nonlinear Dynamics, 2015, 80, 1463-1481.	5.2	38
83	Design, modelling and characterization of a 2-DOF precision positioning platform. Transactions of the Institute of Measurement and Control, 2015, 37, 396-405.	1.7	14
84	A Simple Weighing Method for Spherical Cells. Journal of the Association for Laboratory Automation, 2015, 20, 471-480.	2.8	5
85	Nonlinear Double-Integral Observer and Application to Quadrotor Aircraft. IEEE Transactions on Industrial Electronics, 2015, 62, 1189-1200.	7.9	72
86	Laser-Based Sensing, Measurement, and Misalignment Control of Coupled Linear and Angular Motion for Ultrahigh Precision Movement. IEEE/ASME Transactions on Mechatronics, 2015, 20, 84-92.	5.8	48
87	Vision-based robot-assisted biological cell micromanipulation. , 2014, , .		7
88	Random Weighting Estimation for Quantile Processes and Negatively Associated Samples. Communications in Statistics - Theory and Methods, 2014, 43, 656-662.	1.0	5
89	The bounds on tracking performance utilising a laser-based linear and angular sensing and measurement methodology for micro/nano manipulation. Measurement Science and Technology, 2014, 25, 125005.	2.6	9
90	Modularized design and development of a piezo-actuated translational manipulator. , 2014, , .		1

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91	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.	2.3	42
92	Tissue characterization in medical robotics. , 2014, , .		0
93	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.	1.2	33
94	Laser interferometry measurements based calibration and error propagation identification for pose estimation in mobile robots. <i>Robotica</i> , 2014, 32, 165-174.	1.9	5
95	Vision-based force measurement using neural networks for biological cell microinjection. <i>Journal of Biomechanics</i> , 2014, 47, 1157-1163.	2.1	47
96	Nonlinear continuous integral-derivative observer. <i>Nonlinear Dynamics</i> , 2014, 77, 793-806.	5.2	9
97	High-order nonlinear differentiator and application to aircraft control. <i>Mechanical Systems and Signal Processing</i> , 2014, 46, 227-252.	8.0	42
98	A wearable and highly sensitive pressure sensor with ultrathin gold nanowires. <i>Nature Communications</i> , 2014, 5, 3132.	12.8	1,731
99	Pose estimation with capacitive sensors experiencing non-linear response to tilt. , 2014, , .		1
100	Experimental Investigation of Robust Motion Tracking Control for a 2-DOF Flexure-Based Mechanism. <i>IEEE/ASME Transactions on Mechatronics</i> , 2014, 19, 1737-1745.	5.8	65
101	Design and Computational Optimization of a Decoupled 2-DOF Monolithic Mechanism. <i>IEEE/ASME Transactions on Mechatronics</i> , 2014, 19, 872-881.	5.8	126
102	Design and analysis of a novel flexure-based 3-DOF mechanism. <i>Mechanism and Machine Theory</i> , 2014, 74, 173-187.	4.5	138
103	Nonlinear Multiple Integrator and Application to Aircraft Navigation. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2014, 50, 607-622.	4.7	23
104	Swing-Up and Stability Control of Wheeled Acrobot (WAcrobot). <i>Automatika</i> , 2014, 55, 32-40.	2.0	8
105	Soft Tissue Characterisation Using a Force Feedback-Enabled Instrument for Robotic Assisted Minimally Invasive Surgery Systems. , 2014, , 473-484.		1
106	A Novel Direct Inverse Modeling Approach for Hysteresis Compensation of Piezoelectric Actuator in Feedforward Applications. <i>IEEE/ASME Transactions on Mechatronics</i> , 2013, 18, 981-989.	5.8	213
107	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.	4.1	97
108	Inverse kinematics Analysis of 6-RRCRR parallel manipulators. , 2013, , .		7

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109	Experimental Analysis of Laser Interferometry-Based Robust Motion Tracking Control of a Flexure-Based Mechanism. IEEE Transactions on Automation Science and Engineering, 2013, 10, 267-275.	5.2	48
110	Modelling a precision loadcell using neural networks for vision-based force measurement in cell micromanipulation. , 2013, , .		3
111	A vision-based measurement algorithm for micro/nano manipulation. , 2013, , .		9
112	Compliance modeling and analysis of statically indeterminate symmetric flexure structures. Precision Engineering, 2013, 37, 415-424.	3.4	35
113	Motion control analysis of a parallel robot assisted minimally invasive surgery/microsurgery system (PRAMiSS). Robotics and Computer-Integrated Manufacturing, 2013, 29, 318-327.	9.9	42
114	Design and Kinematics Modeling of a Novel 3-DOF Monolithic Manipulator Featuring Improved Scott-Russell Mechanisms. Journal of Mechanical Design, Transactions of the ASME, 2013, 135, .	2.9	77
115	Transverse vibration analyses of cantilevered boron nitride nanocones. Micro and Nano Letters, 2013, 8, 899-902.	1.3	1
116	A Vision-Based Methodology to Dynamically Track and Describe Cell Deformation during Cell Micromanipulation. International Journal of Optomechatronics, 2013, 7, 33-45.	6.6	14
117	Design, analysis, and experimental investigations of a 2-DOF monolithic parallel mechanism. , 2013, , .		0
118	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
119	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
120	Motion control of a 2-DOF decoupled compliant mechanism using H^∞ synthesis. , 2012, , .		0
121	Remote centre-of-motion control algorithms of 6-RRCRR parallel robot assisted surgery system (PRAMiSS). , 2012, , .		15
122	Kinematics Analysis of 6-DOF Parallel Micro-Manipulators with Offset U-Joints. International Journal of Intelligent Mechatronics and Robotics, 2012, 2, 28-40.	0.4	11
123	Soft tissue deformation with reaction-diffusion process for surgery simulation. Journal of Visual Languages and Computing, 2012, 23, 1-12.	1.8	19
124	Rapid-convergent nonlinear differentiator. Mechanical Systems and Signal Processing, 2012, 28, 414-431.	8.0	25
125	Robust Adaptive Constrained Motion Tracking Control of Piezo-Actuated Flexure-Based Mechanisms for Micro/Nano Manipulation. IEEE Transactions on Industrial Electronics, 2011, 58, 1406-1415.	7.9	108
126	Physics-Based Haptic Simulation of Bone Machining. IEEE Transactions on Haptics, 2011, 4, 39-50.	2.7	59

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127	A hybrid contact state analysis methodology for robotic-based adjustment of cylindrical pair. International Journal of Advanced Manufacturing Technology, 2011, 52, 329-342.	3.0	25
128	Robotic fiber placement process analysis and optimization using response surface method. International Journal of Advanced Manufacturing Technology, 2011, 55, 393-404.	3.0	69
129	Experimental Study of Laser Interferometry Based Motion Tracking of a Flexure-Based Mechanism. International Journal of Intelligent Mechatronics and Robotics, 2011, 1, 31-45.	0.4	6
130	Random weighting estimation for fusion of multi-dimensional position data. Information Sciences, 2010, 180, 4999-5007.	6.9	41
131	Thermal-Mechanical-Based Soft Tissue Deformation for Surgery Simulation. Advanced Robotics, 2010, 24, 1719-1739.	1.8	5
132	An optimal parameter estimation method for soft tissue characterization. , 2010, , .		0
133	Constrained Motion Tracking Control of Piezo-Actuated Flexure-Based Four-Bar Mechanisms for Micro/Nano Manipulation. IEEE Transactions on Automation Science and Engineering, 2010, 7, 699-705.	5.2	33
134	Dynamic analysis of a flexure-based mechanism for precision machining operation. , 2010, , .		0
135	Performance evaluation of a flexure-based five-bar mechanism for micro/nano manipulation. , 2009, , .		3
136	Enhanced sliding-mode constrained motion tracking control of piezo-actuated flexure-based mechanisms. , 2009, , .		2
137	Development of novel hybrid flexure-based microgrippers for precision micro-object manipulation. Review of Scientific Instruments, 2009, 80, 065106.	1.3	24
138	Development of a flexure-based 3-RRR parallel mechanism for nano-manipulation. , 2009, , .		5
139	An electromechanical based deformable model for soft tissue simulation. Artificial Intelligence in Medicine, 2009, 47, 275-288.	6.5	13
140	Development of a novel flexure-based microgripper for high precision micro-object manipulation. Sensors and Actuators A: Physical, 2009, 150, 257-266.	4.1	147
141	Multi-sensor optimal data fusion for INS/GPS/SAR integrated navigation system. Aerospace Science and Technology, 2009, 13, 232-237.	4.8	139
142	Development and dynamic modelling of a flexure-based Scott-Russell mechanism for nano-manipulation. Mechanical Systems and Signal Processing, 2009, 23, 957-978.	8.0	182
143	A new design of piezoelectric driven compliant-based microgripper for micromanipulation. Mechanism and Machine Theory, 2009, 44, 2248-2264.	4.5	108
144	Development of a high precision flexure-based microgripper. Precision Engineering, 2009, 33, 362-370.	3.4	115

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145	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.	4.5	33
146	Nanorobot for Brain Aneurysm. <i>International Journal of Robotics Research</i> , 2009, 28, 558-570.	8.5	99
147	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.	5.8	80
148	Robust Neural Network Motion Tracking Control of Piezoelectric Actuation Systems for Micro/Nanomanipulation. <i>IEEE Transactions on Neural Networks</i> , 2009, 20, 356-367.	4.2	67
149	Modeling and analysis of a new flexure-based micropositioner for precision manipulation. , 2009, , .		0
150	Development of a novel flexure based microgripper for precision manipulation of micro-objects. , 2009, , .		4
151	An Improved Approach to Estimate Soft Tissue Parameters Using Genetic Algorithm for Minimally Invasive Measurement. , 2009, , .		1
152	Modeling and design of a high precision microgripper for microhandling operation. , 2009, , .		0
153	Robust motion tracking control of piezo-driven flexure-based four-bar mechanism for micro/nano manipulation. <i>Mechatronics</i> , 2008, 18, 111-120.	3.3	124
154	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.	4.1	59
155	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.	4.1	79
156	Medical nanorobotics for diabetes control. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2008, 4, 127-138.	3.3	76
157	Nanorobot Hardware Architecture for Medical Defense. <i>Sensors</i> , 2008, 8, 2932-2958.	3.8	96
158	Nanorobot architecture for medical target identification. <i>Nanotechnology</i> , 2008, 19, 015103.	2.6	133
159	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.	5.2	106
160	Towards fully-automated micrograsping for microassembly. , 2008, , .		3
161	Development of a Compliant-Based Microgripper for Microassembly. , 2008, , .		10
162	A new neural network for robot path planning. , 2008, , .		6

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163	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
164	Closed-form equations for the vibrations of a flexure-based Scott-Russell mechanism. , 2008, , .		0
165	Study of neural network motion control of piezoelectric actuation systems for micro/nano manipulation. , 2008, , .		0
166	REACTION-DIFFUSION BASED DEFORMABLE OBJECT SIMULATION. International Journal of Image and Graphics, 2008, 08, 265-280.	1.5	1
167	Learning of biologically inspired behaviors for autonomous robots by a navigational network. , 2008, , .		0
168	A vision-based approach for surface roughness assessment at micro and nano scales. , 2008, , .		4
169	Stiffness estimation of the flexure-based five-bar micro-manipulator. , 2008, , .		3
170	Forward Kinematics and Solution Methodologies for a Flexure-Based Micro-manipulator. Lecture Notes in Computer Science, 2008, , 250-259.	1.3	1
171	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
172	Medical Nanorobot Architecture Based on Nanobioelectronics. Recent Patents on Nanotechnology, 2007, 1, 1-10.	1.3	41
173	Hardware architecture for nanorobot application in cerebral aneurysm. , 2007, , .		16
174	Nanorobots for Laparoscopic Cancer Surgery. , 2007, , .		14
175	Motion tracking control of piezo-driven flexure-based mechanism based on sliding mode strategy. , 2007, , .		2
176	Robust Adaptive Motion Tracking Control of Piezoelectric Actuation Systems for Micro/Nano Manipulation. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	6
177	Trajectory generation for open-contoured structures in robotic fibre placement. Robotics and Computer-Integrated Manufacturing, 2007, 23, 380-394.	9.9	84
178	An evaluation of surface roughness parameters measurement using vision-based data. International Journal of Machine Tools and Manufacture, 2007, 47, 697-708.	13.4	117
179	Enhanced sliding mode motion tracking control of piezoelectric actuators. Sensors and Actuators A: Physical, 2007, 138, 194-202.	4.1	132
180	Feasibility Study of Robust Neural Network Motion Tracking Control of Piezoelectric Actuation Systems for Micro/Nano Manipulation. , 2007, , 5-19.		6

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181	Nanorobot Communication Techniques: A Comprehensive Tutorial. , 2006, , .		41
182	Computational Nanomechatronics: A Pathway for Control and Manufacturing Nanorobots. , 2006, , .		9
183	Direct Kinematics and Analytical Solution to 3RRR Parallel Planar Mechanisms. , 2006, , .		14
184	An autowave based methodology for deformable object simulation. CAD Computer Aided Design, 2006, 38, 740-754.	2.7	18
185	Optimum dynamic balancing of planar parallel manipulators based on sensitivity analysis. Mechanism and Machine Theory, 2006, 41, 1520-1532.	4.5	55
186	Prediction of geometric errors of robot manipulators with Particle Swarm Optimisation method. Robotics and Autonomous Systems, 2006, 54, 956-966.	5.1	59
187	Soft tissue modelling through autowaves for surgery simulation. Medical and Biological Engineering and Computing, 2006, 44, 805-821.	2.8	15
188	A Cellular Neural Network Methodology for Deformable Object Simulation. IEEE Transactions on Information Technology in Biomedicine, 2006, 10, 749-762.	3.2	23
189	A reaction-diffusion methodology for soft object simulation. , 2006, , .		4
190	Simulation of deformable models with the Poisson equation. Computer Methods in Biomechanics and Biomedical Engineering, 2006, 9, 289-304.	1.6	9
191	Experimental Evaluation of Adaptive and Variable Structure Control of Piezoelectric Actuation Systems for Micro/Nano Manipulation. , 2006, , .		0
192	HAPTIC DEFORMATION SIMULATION WITH POISSON EQUATION. International Journal of Image and Graphics, 2006, 06, 445-473.	1.5	1
193	Continuous finite-time control for robotic manipulators with terminal sliding mode. Automatica, 2005, 41, 1957-1964.	5.0	2,178
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