# Bijan Shirinzadeh

List of Publications by Year
in descending order

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|---|---|---|---|
| 216<br>papers | 10,141<br>citations | 50170<br>46<br>h-index | 37111<br>96<br>g-index |
| 216<br>all docs | 216<br>docs citations | 216<br>times ranked | 8369<br>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. | 1.7 | 3 |
| 2 | Optimization of process-induced residual stresses in automated manufacturing of thermoset composites. Aerospace Science and Technology, 2022, 123, 107443. | 2.5 | 5 |
| 3 | Analytical modelling and experiments for hybrid multiaxis flexure hinges. Precision Engineering, 2022, 76, 294-304. | 1.8 | 18 |
| 4 | Evaluation of robotic fiber placement effect on <scp>processâ€induced</scp> residual stresses using incremental <scp>holeâ€drilling</scp> method. Polymer Composites, 2022, 43, 4417-4436. | 2.3 | 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. | 4.4 | 10 |
| 6 | Closed-form compliance equations for elliptic-revolute notch type multiple-axis flexure hinges. Mechanism and Machine Theory, 2021, 156, 104154. | 2.7 | 21 |
| 7 | Design, modeling, and control of a large range 3-DOF micropositioning stage. Mechanism and Machine Theory, 2021, 156, 104159. | 2.7 | 30 |
| 8 | A novel compliant piezoelectric actuated symmetric microgripper for the parasitic motion compensation. Mechanism and Machine Theory, 2021, 155, 104069. | 2.7 | 27 |
| 9 | Enhancing Solid State LiDAR Mapping with a 2D Spinning LiDAR in Urban Scenario SLAM on Ground Vehicles. Sensors, 2021, 21, 1773. | 2.1 | 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. | 3.1 | 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. | 3.1 | 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. | 2.7 | 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. | 2.0 | 11 |
| 14 | On the Sensing and Calibration of Residual Stresses Measurements in the Incremental Hole-Drilling Method. Sensors, 2021, 21, 7447. | 2.1 | 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. | 2.0 | 31 |
| 17 | Improved SP-MCTS-Based Scheduling for Multi-Constraint Hybrid Flow Shop. Applied Sciences (Switzerland), 2020, 10, 6220. | 1.3 | 2 |
| 18 | Computational parametric analysis and experimental investigations of a compact flexure-based microgripper. Precision Engineering, 2020, 66, 363-373. | 1.8 | 21 |

| # | Article | IF | Citations |
|---|---|---|---|
| 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. | 0.3 | 5 |
| 21 | Multiparametric sensitivity analysis of multilayered filament-wound cylinder under internal pressure. Mechanics of Advanced Materials and Structures, 2020, , 1-12. | 1.5 | 2 |
| 22 | Antlion Optimized Robust Control Approach for Micropositioning Trajectory Tracking Tasks. IEEE Access, 2020, 8, 220889-220907. | 2.6 | 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. | 2.1 | 5 |
| 25 | Design, analysis and experimental investigations of a high precision flexure-based microgripper for micro/nano manipulation. Mechatronics, 2020, 69, 102396. | 2.0 | 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 XYÎ¸ micropositioning stage. Mechatronics, 2020, 66, 102343. | 2.0 | 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. | 1.8 | 28 |
| 29 | Topology optimization of stiffness constrained flexure-hinges for precision and range maximization. Mechanism and Machine Theory, 2020, 150, 103874. | 2.7 | 36 |
| 30 | Vibration analysis of a rotating cantilever double-tapered AFGM nanobeam. Microsystem Technologies, 2020, 26, 3657-3676. | 1.2 | 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. | 1.8 | 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. | 3.3 | 32 |
| 34 | Modeling of soft tissue thermal damage based on GPU acceleration. Computer Assisted Surgery, 2019, 24, 5-12. | 0.6 | 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 XYÎ¸ Micro-positioning Mechanism. , 2019, , . | | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 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. | 4.4 | 29 |
| 40 | Optimal Parameter Selection in Robotic Belt Polishing for Aeroengine Blade Based on GRA-RSM Method. Symmetry, 2019, 11, 1526. | 1.1 | 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. | 6.1 | 33 |
| 45 | Topology optimization of leaf flexures to maximize in-plane to out-of-plane compliance ratio. Precision Engineering, 2019, 55, 397-407. | 1.8 | 21 |
| 46 | Development of a 4-DOF haptic micromanipulator utilizing a hybrid parallel-serial flexure mechanism. Mechatronics, 2018, 50, 55-68. | 2.0 | 62 |
| 47 | Design of a XYZ scanner for home-made high-speed atomic force microscopy. Microsystem Technologies, 2018, 24, 3123-3132. | 1.2 | 13 |
| 48 | Topology optimisation of bridge input structures with maximal amplification for design of flexure mechanisms. Mechanism and Machine Theory, 2018, 122, 113-131. | 2.7 | 45 |
| 49 | Closed-Form Modeling and Analysis of an XY Flexure-Based Nano-Manipulator. Chinese Journal of Mechanical Engineering (English Edition), 2018, 31, . | 1.9 | 6 |
| 50 | Modeling and controller design of a 6-DOF precision positioning system. Mechanical Systems and Signal Processing, 2018, 104, 536-555. | 4.4 | 75 |
| 51 | Multi-pass layup process for thermoplastic composites using robotic fiber placement. Robotics and Computer-Integrated Manufacturing, 2018, 49, 277-284. | 6.1 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Topology optimization of leaf flexures for stiffness ratio maximization in compliant mechanisms. , 2018, , . | | 4 |
| 56 | Modeling and tracking control of a novel XYÎ¸z stage. Microsystem Technologies, 2017, 23, 3575-3588. | 1.2 | 11 |
| 57 | 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 |
| 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. Robotics and Computer-Integrated Manufacturing, 2017, 44, 77-96. | 6.1 | 68 |
| 60 | Pose estimation and calibration using nonlinear capacitance sensor models for micro/nano positioning. Sensors and Actuators A: Physical, 2017, 253, 118-130. | 2.0 | 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. Micromachines, 2017, 8, 238. | 1.4 | 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. Electronics (Switzerland), 2016, 5, 81. | 1.8 | 4 |
| 65 | Design and analysis of a compact flexure-based precision pure rotation stage without actuator redundancy. Mechanism and Machine Theory, 2016, 105, 129-144. | 2.7 | 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. Mechatronics, 2016, 40, 156-166. | 2.0 | 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. Precision Engineering, 2016, 46, 383-392. | 1.8 | 8 |
| 72 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 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. | 3.7 | 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. | 3.7 | 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. | 6.1 | 82 |
| 77 | Soft tissue modelling with conical springs. Bio-Medical Materials and Engineering, 2015, 26, S207-S214. | 0.4 | 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 linearâ€“angular precision positioning stage. Mechatronics, 2015, 32, 34-43. | 2.0 | 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. | 2.7 | 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. | 1.1 | 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. | 5.2 | 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. | 3.7 | 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. | 0.6 | 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. | 1.4 | 9 |
| 90 | Modularized design and development of a piezo-actuated translational manipulator. , 2014, , . | | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | An actuated force feedback-enabled laparoscopic instrument for robotic-assisted surgery. International Journal of Medical Robotics and Computer Assisted Surgery, 2014, 10, 11-21. | 1.2 | 42 |
| 92 | Tissue characterization in medical robotics. , 2014, , . | | 0 |
| 93 | Effects of realistic force feedback in a robotic assisted minimally invasive surgery system. Minimally Invasive Therapy and Allied Technologies, 2014, 23, 127-135. | 0.6 | 33 |
| 94 | Laser interferometry measurements based calibration and error propagation identification for pose estimation in mobile robots. Robotica, 2014, 32, 165-174. | 1.3 | 5 |
| 95 | Vision-based force measurement using neural networks for biological cell microinjection. Journal of Biomechanics, 2014, 47, 1157-1163. | 0.9 | 47 |
| 96 | Nonlinear continuous integral-derivative observer. Nonlinear Dynamics, 2014, 77, 793-806. | 2.7 | 9 |
| 97 | High-order nonlinear differentiator and application to aircraft control. Mechanical Systems and Signal Processing, 2014, 46, 227-252. | 4.4 | 42 |
| 98 | A wearable and highly sensitive pressure sensor with ultrathin gold nanowires. Nature Communications, 2014, 5, 3132. | 5.8 | 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. IEEE/ASME Transactions on Mechatronics, 2014, 19, 1737-1745. | 3.7 | 65 |
| 101 | Design and Computational Optimization of a Decoupled 2-DOF Monolithic Mechanism. IEEE/ASME Transactions on Mechatronics, 2014, 19, 872-881. | 3.7 | 126 |
| 102 | Design and analysis of a novel flexure-based 3-DOF mechanism. Mechanism and Machine Theory, 2014, 74, 173-187. | 2.7 | 138 |
| 103 | Nonlinear Multiple Integrator and Application to Aircraft Navigation. IEEE Transactions on Aerospace and Electronic Systems, 2014, 50, 607-622. | 2.6 | 23 |
| 104 | Swing-Up and Stability Control of Wheeled Acrobot (WAcrobot). Automatika, 2014, 55, 32-40. | 1.2 | 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. IEEE/ASME Transactions on Mechatronics, 2013, 18, 981-989. | 3.7 | 213 |
| 107 | Design issues in a decoupled XY stage: Static and dynamics modeling, hysteresis compensation, and tracking control. Sensors and Actuators A: Physical, 2013, 194, 95-105. | 2.0 | 97 |
| 108 | Inverse kinematics Analysis of 6-RRCRR parallel manipulators. , 2013, , . | | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 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. | 3.4 | 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. | 1.8 | 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. | 6.1 | 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, . | 1.7 | 77 |
| 115 | Transverse vibration analyses of cantilevered boron nitride nanocones. Micro and Nano Letters, 2013, 8, 899-902. | 0.6 | 1 |
| 116 | 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 |
| 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<inf>∞</inf> 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. | 4.4 | 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. | 5.2 | 108 |
| 126 | Physics-Based Haptic Simulation of Bone Machining. IEEE Transactions on Haptics, 2011, 4, 39-50. | 1.8 | 59 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | A hybrid contact state analysis methodology for robotic-based adjustment of cylindrical pair. International Journal of Advanced Manufacturing Technology, 2011, 52, 329-342. | 1.5 | 25 |
| 128 | Robotic fiber placement process analysis and optimization using response surface method. International Journal of Advanced Manufacturing Technology, 2011, 55, 393-404. | 1.5 | 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. | 4.0 | 41 |
| 131 | Thermalâ€“Mechanical-Based Soft Tissue Deformation for Surgery Simulation. Advanced Robotics, 2010, 24, 1719-1739. | 1.1 | 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. | 3.4 | 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. | 0.6 | 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. | 3.8 | 13 |
| 140 | Development of a novel flexure-based microgripper for high precision micro-object manipulation. Sensors and Actuators A: Physical, 2009, 150, 257-266. | 2.0 | 147 |
| 141 | Multi-sensor optimal data fusion for INS/GPS/SAR integrated navigation system. Aerospace Science and Technology, 2009, 13, 232-237. | 2.5 | 139 |
| 142 | Development and dynamic modelling of a flexure-based Scottâ€“Russell mechanism for nano-manipulation. Mechanical Systems and Signal Processing, 2009, 23, 957-978. | 4.4 | 182 |
| 143 | A new design of piezoelectric driven compliant-based microgripper for micromanipulation. Mechanism and Machine Theory, 2009, 44, 2248-2264. | 2.7 | 108 |
| 144 | Development of a high precision flexure-based microgripper. Precision Engineering, 2009, 33, 362-370. | 1.8 | 115 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Feasibility assessment of vision-based surface roughness parameters acquisition for different types of machined specimens. Image and Vision Computing, 2009, 27, 444-458. | 2.7 | 33 |
| 146 | Nanorobot for Brain Aneurysm. International Journal of Robotics Research, 2009, 28, 558-570. | 5.8 | 99 |
| 147 | Neural Network Motion Tracking Control of Piezo-Actuated Flexure-Based Mechanisms for Micro-/Nanomanipulation. IEEE/ASME Transactions on Mechatronics, 2009, 14, 517-527. | 3.7 | 80 |
| 148 | Robust Neural Network Motion Tracking Control of Piezoelectric Actuation Systems for Micro/Nanomanipulation. IEEE Transactions on Neural Networks, 2009, 20, 356-367. | 4.8 | 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. Mechatronics, 2008, 18, 111-120. | 2.0 | 124 |
| 154 | Enhanced adaptive motion tracking control of piezo-actuated flexure-based four-bar mechanisms for micro/nano manipulation. Sensors and Actuators A: Physical, 2008, 147, 254-262. | 2.0 | 59 |
| 155 | Robust generalised impedance control of piezo-actuated flexure-based four-bar mechanisms for micro/nano manipulation. Sensors and Actuators A: Physical, 2008, 148, 443-453. | 2.0 | 79 |
| 156 | Medical nanorobotics for diabetes control. Nanomedicine: Nanotechnology, Biology, and Medicine, 2008, 4, 127-138. | 1.7 | 76 |
| 157 | Nanorobot Hardware Architecture for Medical Defense. Sensors, 2008, 8, 2932-2958. | 2.1 | 96 |
| 158 | Nanorobot architecture for medical target identification. Nanotechnology, 2008, 19, 015103. | 1.3 | 133 |
| 159 | Sliding-Mode Enhanced Adaptive Motion Tracking Control of Piezoelectric Actuation Systems for Micro/Nano Manipulation. IEEE Transactions on Control Systems Technology, 2008, 16, 826-833. | 3.2 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 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. | 1.2 | 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. | 1.0 | 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. | 0.7 | 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. | 6.1 | 84 |
| 178 | An evaluation of surface roughness parameters measurement using vision-based data. International Journal of Machine Tools and Manufacture, 2007, 47, 697-708. | 6.2 | 117 |
| 179 | Enhanced sliding mode motion tracking control of piezoelectric actuators. Sensors and Actuators A: Physical, 2007, 138, 194-202. | 2.0 | 132 |
| 180 | Feasibility Study of Robust Neural Network Motion Tracking Control of Piezoelectric Actuation Systems for Micro/Nano Manipulation. , 2007, , 5-19. | | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 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. | 1.4 | 18 |
| 185 | Optimum dynamic balancing of planar parallel manipulators based on sensitivity analysis. Mechanism and Machine Theory, 2006, 41, 1520-1532. | 2.7 | 55 |
| 186 | Prediction of geometric errors of robot manipulators with Particle Swarm Optimisation method. Robotics and Autonomous Systems, 2006, 54, 956-966. | 3.0 | 59 |
| 187 | Soft tissue modelling through autowaves for surgery simulation. Medical and Biological Engineering and Computing, 2006, 44, 805-821. | 1.6 | 15 |
| 188 | A Cellular Neural Network Methodology for Deformable Object Simulation. IEEE Transactions on Information Technology in Biomedicine, 2006, 10, 749-762. | 3.6 | 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. | 0.9 | 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. | 1.2 | 1 |
| 193 | Continuous finite-time control for robotic manipulators with terminal sliding mode. Automatica, 2005, 41, 1957-1964. | 3.0 | 2,178 |
| 194 | A systematic technique to estimate positioning errors for robot accuracy improvement using laser interferometry based sensing. Mechanism and Machine Theory, 2005, 40, 879-906. | 2.7 | 171 |
| 195 | Solid modelling in a virtual reality environment. Visual Computer, 2005, 21, 17-40. | 2.5 | 12 |
| 196 | Assembly Modelling Through Constraint-based Manipulations in A Virtual Reality Environment. , 2005, , . | | 2 |
| 197 | Robust Control Framework for Piezoelectric Actuation Systems in Micro/Nano Manipulation. , 2005, , . | | 2 |
| 198 | Topology optimisation and singularity analysis of a 3-SPS parallel manipulator with a passive constraining spherical joint. Mechanism and Machine Theory, 2004, 39, 215-235. | 2.7 | 91 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Intelligent robotic fettling using a visual feedback technique and force sensing. International Journal of Advanced Manufacturing Technology, 2004, 24, 607-614. | 1.5 | 9 |
| 200 | Fabrication process of open surfaces by robotic fibre placement. Robotics and Computer-Integrated Manufacturing, 2004, 20, 17-28. | 6.1 | 82 |
| 201 | Optimum synthesis of planar parallel manipulators based on kinematic isotropy and force balancing. Robotica, 2004, 22, 97-108. | 1.3 | 57 |
| 202 | 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 |
| 203 | A mathematical model for a pneumatically actuated robotic fibre placement system. Robotica, 2002, 20, 545-551. | 1.3 | 13 |
| 204 | Flexible fixturing for workpiece positioning and constraining. Assembly Automation, 2002, 22, 112-120. | 1.0 | 38 |
| 205 | The measurement uncertainties in the laser interferometry-based sensing and tracking technique. Measurement: Journal of the International Measurement Confederation, 2002, 32, 135-150. | 2.5 | 85 |
| 206 | Dynamic analysis of reconfigurable fixture construction by a manipulator. Robotics and Computer-Integrated Manufacturing, 2001, 17, 367-377. | 6.1 | 16 |
| 207 | Robotic fibre placement process planning and control. Assembly Automation, 2000, 20, 313-320. | 1.0 | 40 |
| 208 | Laserâ€interferometryâ€based tracking for dynamic measurements. Industrial Robot, 1998, 25, 35-41. | 1.2 | 55 |
| 209 | A mechatronic wrist unit for precision tasks. Industrial Robot, 1997, 24, 446-451. | 1.2 | 2 |
| 210 | Strategies for planning and implementation of flexible fixturing systems in a computer integrated manufacturing environment. Computers in Industry, 1996, 30, 175-183. | 5.7 | 9 |
| 211 | 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 |
| 212 | Experimental investigation of the performance of a reconfigurable fixturing system. International Journal of Advanced Manufacturing Technology, 1995, 10, 330-341. | 1.5 | 14 |
| 213 | Flexible and automated workholding systems. Industrial Robot, 1995, 22, 29-34. | 1.2 | 34 |
| 214 | Issues in the design of the reconfigurable fixture modules for robotic assembly. Journal of Manufacturing Systems, 1993, 12, 1-14. | 7.6 | 42 |
| 215 | Surgical Slave with a Novel Method for Force Sensing and Trocar Friction Reduction. Advanced Materials Research, 0, 622-623, 1362-1367. | 0.3 | 2 |
| 216 | Experimental Study of Laser Interferometry Based Motion Tracking of a Flexure-Based Mechanism. , 0, , 165-178. | | 0 |