

Xuping Zhang Zhang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4063815/publications.pdf>

Version: 2024-02-01

77
papers

1,191
citations

471371

17
h-index

414303

32
g-index

77
all docs

77
docs citations

77
times ranked

709
citing authors

#	ARTICLE	IF	CITATIONS
1	A hybrid numerical method for vibration analysis of linear multibody systems with flexible components. <i>Applied Mathematical Modelling</i> , 2022, 101, 748-771.	2.2	12
2	Learning-based object detection and localization for a mobile robot manipulator in SME production. <i>Robotics and Computer-Integrated Manufacturing</i> , 2022, 73, 102229.	6.1	38
3	An intuitive representation and analysis of multi-rotor wind turbine whirling modes. <i>Wind Energy</i> , 2022, 25, 553-572.	1.9	1
4	Comparison of the Dynamic Performance of Planar 3-DOF Parallel Manipulators. <i>Machines</i> , 2022, 10, 233.	1.2	3
5	Interaction dynamics modeling and adaptive impedance control of robotic exoskeleton for adolescent idiopathic scoliosis. <i>Computers in Biology and Medicine</i> , 2022, 145, 105495.	3.9	4
6	Theoretical thermal-mechanical modelling and experimental validation of a novel 3D three-fingered electrothermal microgripper. <i>Precision Engineering</i> , 2022, 77, 205-219.	1.8	0
7	A Switchable Rigid-Continuum Robot Arm: Design and Testing. , 2022, , .		1
8	Digital Twin with Integrated Robot-Human/Environment Interaction Dynamics for an Industrial Mobile Manipulator. , 2022, , .		4
9	Dynamic Modeling and Digital Twin of a Harmonic Drive Based Collaborative Robot Joint. , 2022, , .		3
10	Optimum time-energy-jerk trajectory planning for serial robotic manipulators by reparameterized quintic NURBS curves. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2021, 235, 4382-4393.	1.1	18
11	Macro-to-micro positioning and auto focusing for fully automated single cell microinjection. <i>Microsystem Technologies</i> , 2021, 27, 11-21.	1.2	9
12	Vibration control of industrial robot arms by multi-mode time-varying input shaping. <i>Mechanism and Machine Theory</i> , 2021, 155, 104072.	2.7	36
13	Adaptive feedforward control of a collaborative industrial robot manipulator using a novel extension of the Generalized Maxwell-Slip friction model. <i>Mechanism and Machine Theory</i> , 2021, 155, 104109.	2.7	18
14	A novel methodology for analyzing modal dynamics of multi-rotor wind turbines. <i>Journal of Sound and Vibration</i> , 2021, 493, 115810.	2.1	19
15	Design, Fabrication, and Testing of a Novel 3D 3-Fingered Electrothermal Microgripper with Multiple Degrees of Freedom. <i>Micromachines</i> , 2021, 12, 444.	1.4	10
16	A Tutorial Review on Point Cloud Registrations: Principle, Classification, Comparison, and Technology Challenges. <i>Mathematical Problems in Engineering</i> , 2021, 2021, 1-32.	0.6	10
17	Fuzzy sliding mode variable structure control of a high-speed parallel PnP robot. <i>Mechanism and Machine Theory</i> , 2021, 162, 104349.	2.7	18
18	On critical aeroelastic modes of a tri-rotor wind turbine. <i>International Journal of Mechanical Sciences</i> , 2021, 204, 106525.	3.6	13

#	ARTICLE	IF	CITATIONS
19	A Nonlinear Mechanic Model of a Zebrafish Embryo under Microinjection. , 2021, , .		1
20	Theoretical Thermal-Mechanical Modelling and Experimental Validation of a Three-Dimensional (3D) Electrothermal Microgripper with Three Fingers. Micromachines, 2021, 12, 1512.	1.4	3
21	Automated manipulation of zebrafish embryos using an electrothermal microgripper. Microsystem Technologies, 2020, 26, 1823-1834.	1.2	17
22	Dynamics Parametrization and Calibration of Flexible-Joint Collaborative Industrial Robot Manipulators. Mathematical Problems in Engineering, 2020, 2020, 1-13.	0.6	6
23	Design and Simulation of A Novel Three-Dimensional Multi-Degree-Of-Freedom Electrothermal Microgripper. , 2020, , .		1
24	Control Strategy for a Developed Robotic Spine Exoskeleton. , 2020, , .		0
25	Comprehensive modeling and identification of nonlinear joint dynamics for collaborative industrial robot manipulators. Control Engineering Practice, 2020, 101, 104462.	3.2	39
26	Integrating Dynamics into Design and Motion Optimization of a 3-PRR Planar Parallel Manipulator with Discrete Time Transfer Matrix Method. Mathematical Problems in Engineering, 2020, 2020, 1-23.	0.6	9
27	Practical Control of a Cold Milling Machine using an Adaptive PID Controller. Applied Sciences (Switzerland), 2020, 10, 2516.	1.3	5
28	Review on the Development and Applications of Vibration Isolators. , 2019, , .		0
29	A Mechanic Model and Velocity Optimization of Cell Microinjection. , 2019, , .		1
30	A Novel Auto-Focusing Algorithm for Automated Cell Immobilization. , 2019, , .		0
31	A Novel Recognition Algorithm in 3D Point Clouds based for on Local Spherical Harmonics. , 2019, , .		1
32	A Tutorial Survey and Comparison of Impedance Control on Robotic Manipulation. Robotica, 2019, 37, 801-836.	1.3	84
33	Smooth online time-varying input shaping with fractional delay FIR filtering. Control Engineering Practice, 2019, 88, 21-37.	3.2	4
34	Automated Macro-Micro Manipulation for Robotic Microinjection with Computer Vision. , 2019, , .		0
35	Concept Design and Dynamic Modelling of a Fibre-Based Continuum Robot for Early Cancer Detection Using DT-TMM. Mechanisms and Machine Science, 2019, , 177-185.	0.3	3
36	Theoretical modal analysis and parameter study of Z-shaped electrothermal microactuators. Microsystem Technologies, 2018, 24, 3149-3160.	1.2	4

#	ARTICLE	IF	CITATIONS
37	Computationally efficient dynamic modeling of robot manipulators with multiple flexible-links using acceleration-based discrete time transfer matrix method. <i>Robotics and Computer-Integrated Manufacturing</i> , 2018, 49, 181-193.	6.1	30
38	Dynamic Modeling and Analysis of a Mobile Flexible Robot Arm. , 2018, , .		0
39	Experimental Study on the Life and Nonlinear Actuation Behaviors of V-shaped SU-8 Electrothermal Microactuators. , 2018, , .		2
40	Experimental Testing and Performance Comparisons between V - and Z-shaped Electrothermal Microactuators. , 2018, , .		1
41	Vibration Modes and Parameter Analysis of V-Shaped Electrothermal Microactuators. <i>Shock and Vibration</i> , 2018, 2018, 1-12.	0.3	3
42	Closed-form modelling and design analysis of V- and Z-shaped electrothermal microactuators. <i>Journal of Micromechanics and Microengineering</i> , 2017, 27, 015023.	1.5	34
43	Vibration Analysis of V-Shaped Beam Electrothermal Microactuators. , 2017, , .		2
44	A Model Compensation-Prediction Scheme for Control of Micromanipulation Systems With a Single Feedback Loop. <i>IEEE/ASME Transactions on Mechatronics</i> , 2017, 22, 1973-1982.	3.7	4
45	Dynamic modelling and analysis of V- and Z-shaped electrothermal microactuators. <i>Microsystem Technologies</i> , 2017, 23, 3775-3789.	1.2	36
46	Impedance Control of Robots: An Overview. , 2017, , .		20
47	An equivalent line-beam vibration model for frequency analysis of the V-and Z-shaped electrothermal microactuators. , 2017, , .		0
48	Vibration Analysis of U-Shaped Beam Electrothermal Microactuators. , 2017, , .		2
49	Structure and Design of Microgrippers: A Survey. , 2017, , .		2
50	Sensing and Intelligent Perception in Robotic Applications. <i>Journal of Sensors</i> , 2016, 2016, 1-1.	0.6	1
51	Dynamic electro-thermal modeling of V- and Z-shaped electrothermal microactuator. , 2016, , .		10
52	A comparison model of V- and Z-shaped electrothermal microactuators. , 2015, , .		26
53	Dynamic Modeling of Flexible Robot Manipulators: Acceleration-Based Discrete Time Transfer Matrix Method. <i>Mechanisms and Machine Science</i> , 2015, , 377-386.	0.3	2
54	A Comprehensive Analytical Model and Experimental Validation of Z-shaped Electrothermal Microactuators. <i>Mechanisms and Machine Science</i> , 2015, , 177-187.	0.3	13

#	ARTICLE	IF	CITATIONS
55	An optical tracker based robot registration and servoing method for ultrasound guided percutaneous renal access. BioMedical Engineering OnLine, 2013, 12, 47.	1.3	15
56	Controlled positioning of biological cells inside a micropipette. , 2012, , .		1
57	Controlled Aspiration and Positioning of Biological Cells in a Micropipette. IEEE Transactions on Biomedical Engineering, 2012, 59, 1032-1040.	2.5	65
58	Three-Dimensional Rotation of Mouse Embryos. IEEE Transactions on Biomedical Engineering, 2012, 59, 1049-1056.	2.5	98
59	Batch Transfer of Zebrafish Embryos Into Multiwell Plates. IEEE Transactions on Automation Science and Engineering, 2011, 8, 625-632.	3.4	14
60	Robotic ICSI (Intracytoplasmic Sperm Injection). IEEE Transactions on Biomedical Engineering, 2011, 58, 2102-2108.	2.5	141
61	Automated batch transfer of zebrafish embryos using a multi-degrees-of-freedom system. , 2011, , .		0
62	Automated cell manipulation: Robotic ICSI. , 2011, , .		5
63	MULTI-MODE VIBRATION CONTROL AND POSITION ERROR ANALYSIS OF PARALLEL MANIPULATOR WITH MULTIPLE FLEXIBLE LINKS. Transactions of the Canadian Society for Mechanical Engineering, 2010, 34, 197-213.	0.3	17
64	Experimental Implementation on Vibration Mode Control of a Moving 3-PRR Flexible Parallel Manipulator with Multiple PZT Transducers. JVC/Journal of Vibration and Control, 2010, 16, 2035-2054.	1.5	37
65	Investigation of axial forces on dynamic properties of a flexible 3-PRR planar parallel manipulator moving with high speed. Robotica, 2010, 28, 607-619.	1.3	13
66	Vibration suppression of a 3-PRR flexible parallel manipulator using input shaping. , 2009, , .		11
67	Coupling characteristics of rigid body motion and elastic deformation of a 3-PRR parallel manipulator with flexible links. Multibody System Dynamics, 2009, 21, 167-192.	1.7	27
68	Vibration control of elastodynamic response of a 3-PRR flexible parallel manipulator using PZT transducers. Robotica, 2008, 26, 655-665.	1.3	28
69	Active Vibration Control of a 3-PRR Flexible Parallel Manipulator With PZT Actuators and Sensors. , 2008, , .		2
70	Dynamic modeling and active vibration control of a 3-PRR flexible parallel manipulator with PZT transducers. , 2008, , .		4
71	Effect of axial forces on lateral stiffness of a flexible 3-PRR parallel manipulator moving with high-speed. , 2008, , .		2
72	Study on the Effect of Elastic Deformations on Rigid Body Motions of a 3-PRR Flexible Parallel Manipulator. , 2007, , .		5

#	ARTICLE	IF	CITATIONS
73	Dynamic Modeling and Experimental Validation of a 3-PRR Parallel Manipulator with Flexible Intermediate Links. Journal of Intelligent and Robotic Systems: Theory and Applications, 2007, 50, 323-340.	2.0	82
74	Structural Vibration Control of a Moving 3-PRR Flexible Parallel Manipulator With Multiple PZT Actuators and Sensors. , 2007, , .		1
75	Motion control of flexible robot manipulators via optimizing redundant configurations. Mechanism and Machine Theory, 2001, 36, 883-892.	2.7	21
76	A new spatial rotor beam element for modeling spatial manipulators with joint and link flexibility. Mechanism and Machine Theory, 2000, 35, 403-421.	2.7	16
77	An active control method for vibration reduction of a single-link flexible manipulator. Journal of Low Frequency Noise Vibration and Active Control, 0, , 146134842210949.	1.3	3