Yili Fu

List of Publications by Year
in descending order

127 papers	1,000 citations	686830 13 h-index	610482 24 g-index
127 all docs	127 docs citations	127 times ranked	1087 citing authors

#	Article	IF	Citations
1	Event-Triggered Robust Fuzzy Adaptive Finite-Time Control of Nonlinear Systems With Prescribed Performance. IEEE Transactions on Fuzzy Systems, 2021, 29, 1460-1471.	6.5	162
2	Steerable catheters in minimally invasive vascular surgery. International Journal of Medical Robotics and Computer Assisted Surgery, 2009, 5, 381-391.	1.2	122
3	Design and Experiments of a Novel Hydraulic Wheel-Legged Robot (WLR). , 2018, , .		36
4	Coordinative Motion-based Bilateral Rehabilitation Training System with Exoskeleton and Haptic Devices for Biomedical Application. Micromachines, 2019, 10, 8.	1.4	25
5	Lightweight Deep Neural Network for Real-Time Instrument Semantic Segmentation in Robot Assisted Minimally Invasive Surgery. IEEE Robotics and Automation Letters, 2021, 6, 3870-3877.	3.3	24
6	Integrating Compliant Actuator and Torque Limiter Mechanism for Safe Home-Based Upper-Limb Rehabilitation Device Design. Journal of Medical and Biological Engineering, 2017, 37, 357-364.	1.0	23
7	WLR-II, a Hose-less Hydraulic Wheel-legged Robot. , 2019, , .		22
8	Model Decoupling and Control of the Wheeled Humanoid Robot Moving in Sagittal Plane. , 2019, , .		21
9	Brain-derived neurotrophic factor alleviates diabetes mellitus-accelerated atherosclerosis by promoting M2 polarization of macrophages through repressing the STAT3 pathway. Cellular Signalling, 2020, 70, 109569.	1.7	21
10	New Results on Fuzzy Integral Sliding Mode Control of Nonlinear Singularly Perturbed Systems. IEEE Transactions on Fuzzy Systems, 2021, 29, 2062-2067.	6.5	20
11	Leg Trajectory Planning for Quadruped Robots with High-Speed Trot Gait. Applied Sciences (Switzerland), 2019, 9, 1508.	1.3	19
12	Design and development of a hand rehabilitation robot for patient-cooperative therapy following stroke. , 2011, , .		17
13	A fast two-step marker-controlled watershed image segmentation method. , 2012, , .		17
14	Development of a New Medical Robot System for Minimally Invasive Surgery. IEEE Access, 2020, 8, 144136-144155.	2.6	16
15	Variable stiffness control of series elastic actuated biped locomotion. Intelligent Service Robotics, 2018, 11, 225-235.	1.6	15
16	Joint Stiffness Identification and Deformation Compensation of Serial Robots Based on Dual Quaternion Algebra. Applied Sciences (Switzerland), 2019, 9, 65.	1.3	15
17	CAM-FoC: A High Accuracy Lightweight Deep Neural Network for Grip Force Measurement of Elongated Surgical Instrument. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	2.4	14
18	A novel modelling and simulation method of hip joint surface contact stress. Bioengineered, 2017, 8, 105-112.	1.4	13

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19	A Telepresence System for Therapist-in-the-Loop Training for Elbow Joint Rehabilitation. Applied Sciences (Switzerland), 2019, 9, 1710.	1.3	13
20	Design and development of a portable exoskeleton based CPM machine for rehabilitation of hand injuries. , 2007, , .		12
21	Design of a new haptic device and experiments in minimally invasive surgical robot. Computer Assisted Surgery, 2017, 22, 240-250.	0.6	12
22	Dynamic Visual Tracking for Robot Manipulator Using Adaptive Fading Kalman Filter. IEEE Access, 2020, 8, 35113-35126.	2.6	12
23	Design of a Novel Elastic Torque Sensor for Hand Injuries Rehabilitation Based on Bowden Cable. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 3184-3192.	2.4	11
24	Path Planning of Cooperative Robotics and Robot Team. , 2006, , .		10
25	A Network Biology Approach to Discover the Molecular Biomarker Associated with Hepatocellular Carcinoma. BioMed Research International, 2014, 2014, 1-6.	0.9	10
26	A novel 4-DOF surgical instrument with modular joints and 6-Axis Force sensing capability. International Journal of Medical Robotics and Computer Assisted Surgery, 2017, 13, e1751.	1.2	10
27	Computerâ€assisted automatic localization of the human pedunculopontine nucleus in T1â€weighted MR images: a preliminary study. International Journal of Medical Robotics and Computer Assisted Surgery, 2009, 5, 309-318.	1.2	9
28	Magnetic resonance imaging and transrectal ultrasound prostate image segmentation based on improved level set for robotic prostate biopsy navigation. International Journal of Medical Robotics and Computer Assisted Surgery, 2021, 17, 1-14.	1.2	9
29	A Portable Device for Hand Rehabilitation With Force Cognition: Design, Interaction, and Experiment. IEEE Transactions on Cognitive and Developmental Systems, 2022, 14, 599-607.	2.6	9
30	Real-time motion planning for robot manipulators in unknown environments using infrared sensors. Robotica, 2007, 25, 201-211.	1.3	8
31	A non-linear, anisotropic mass spring model based simulation for soft tissue deformation. , 2014, , .		8
32	Experiments and kinematics analysis of a hand rehabilitation exoskeleton with circuitous joints. Bio-Medical Materials and Engineering, 2015, 26, S665-S672.	0.4	8
33	A human-robot interaction modeling approach for hand rehabilitation exoskeleton using biomechanical technique. , 2015, , .		7
34	Masterâ€“slave real-time control strategy in Cartesian space for a novel surgical robot for minimally invasive surgery. Computer Assisted Surgery, 2016, 21, 69-77.	0.6	7
35	A Q-learning approach based on human reasoning for navigation in a dynamic environment. Robotica, 2019, 37, 445-468.	1.3	7
36	Development of a transperineal prostate biopsy robot guided by MRIâ€TRUS image. International Journal of Medical Robotics and Computer Assisted Surgery, 2021, 17, e2266.	1.2	7

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37	Variable stiffness control and implementation of hydraulic SEA based on virtual spring leg. , 2016, , .		6
38	Control system design for a novel minimally invasive surgical robot. Computer Assisted Surgery, 2016, 21, 45-53.	0.6	6
39	3-DOF bionic parallel mechanism design and analysis for a snake-like robot. , 2016, , .		6
40	An Improved Dynamic Window Approach Integrated Global Path Planning. , 2019, , .		6
41	Adaptive Fusion-Based Autonomous Laparoscope Control for Semi-Autonomous Surgery. Journal of Medical Systems, 2020, 44, 4.	2.2	6
42	Vision-based handâ€“eye calibration for robot-assisted minimally invasive surgery. International Journal of Computer Assisted Radiology and Surgery, 2020, 15, 2061-2069.	1.7	6
43	Visualâ€based autonomous field of view control of laparoscope with safetyâ€RCM constraints for semiâ€autonomous surgery. International Journal of Medical Robotics and Computer Assisted Surgery, 2020, 16, e2079.	1.2	6
44	Locomotion Adaption for Hydraulic Humanoid Wheel-Legged Robots Over Rough Terrains. International Journal of Humanoid Robotics, 2021, 18, 2150001.	0.6	6
45	Research on Workspace of A Two-arm Surgical Robot. , 2007, , .		5
46	Position Planning for Laparoscopic Robot in Minimally Invasive Surgery. , 2007, , .		5
47	Design and optimization of remote center motion mechanism of Minimally Invasive Surgical robotics. , 2013, , .		5
48	Approach movement of redundant manipulator using stereo vision. , 2014, , .		5
49	Adaptive dynamic surface control for vision-based stabilization of an uncertain electrically driven nonholonomic mobile robot. Robotica, 2016, 34, 449-467.	1.3	5
50	Smooth transition of the CPG-based controller for snake-like robots. , 2017, , .		5
51	Design and Experiment Evaluation of a Magneto-Rheological Damper for the Legged Robot. , 2018, , .		5
52	Improved surgical instruments without coupled motion used in minimally invasive surgery. International Journal of Medical Robotics and Computer Assisted Surgery, 2018, 14, e1942.	1.2	5
53	Grip Force Perception Based on dAENN for Minimally Invasive Surgery Robot. , 2019, , .		5
54	Facial landmarkâ€guided surface matching for imageâ€toâ€patient registration with an RGBâ€D camera. International Journal of Medical Robotics and Computer Assisted Surgery, 2022, 18, e2373.	1.2	5

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55	Ultrasound-guided prostate percutaneous intervention robot system and calibration by informative particle swarm optimization. Frontiers of Mechanical Engineering, 2022, 17, 1.	2.5	5
56	Lightweight Deep Neural Network for Articulated Joint Detection of Surgical Instrument in Minimally Invasive Surgical Robot. Journal of Digital Imaging, 2022, 35, 923-937.	1.6	5
57	Development of an Embedded Control Platform of a Continuous Passive Motion Machine. , 2006, , .		4
58	Development of a wall climbing robot with wheel-leg hybrid locomotion mechanism. , 2007, , .		4
59	A human-machine interface software based on android system for hand rehabilitation robot. , 2015, , .		4
60	Multi-cameras visual servoing for dual-arm coordinated manipulation. Robotica, 2017, 35, 2218-2237.	1.3	4
61	Vertical Jump Control of Hydraulic Single Legged Robot (HSLR). , 2019, , .		4
62	Preoperative Planning Algorithm for Robot-Assisted Minimally Invasive Cholecystectomy Combined With Appendectomy. IEEE Access, 2020, 8, 177100-177111.	2.6	4
63	A Novel Grip Force Cognition Scheme for Robot-Assisted Minimally Invasive Surgery. IEEE Transactions on Cognitive and Developmental Systems, 2021, 13, 391-402.	2.6	4
64	Structure Types Design and Genetic Algorithm Dimension Synthesis of a CPM Machine for Injured Fingers. , 0, , .		3
65	A dynamic control method for free-floating space manipulator in task space. , 2007, , .		3
66	Development of a multi-DOF exoskeleton based machine for injured fingers. , 2008, , .		3
67	A dynamic model for the active catheter actuated by the shape memory alloy coil spring. , 2009, , .		3
68	Master-slave control strategy for abdominal minimally invasive surgery robotic system. , 2011, , .		3
69	Dynamic obstacle avoidance of mobile robot tele-operation based on non-contact impedance control. , 2014, , .		3
70	Experimental study of static and dynamic characteristics of a miniature 6-axis force and torque sensor. , 2015, , .		3
71	Mechanical design and gait plan of a hydraulic-actuated biped robot. , 2015, , .		3
72	Intuitive control algorithm of a novel minimally invasive surgical robot. Computer Assisted Surgery, 2016, 21, 92-101.	0.6	3

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73	Automatic Extraction of the Centerline of Corpus Callosum from Segmented Mid-Sagittal MR Images. Computational and Mathematical Methods in Medicine, 2018, 2018, 1-10.	0.7	3
74	Prior knowledge snake segmentation of ultrasound images denoised by Jâ€divergence anisotropy diffusion. International Journal of Medical Robotics and Computer Assisted Surgery, 2018, 14, e1924.	1.2	3
75	Leg Locomotion Adaption for Quadruped Robots with Ground Compliance Estimation. Applied Bionics and Biomechanics, 2020, 2020, 1-15.	0.5	3
76	Configuration Transformation of the Wheel-Legged Robot Using Inverse Dynamics Control. , 2021, , .		3
77	Development and Test of a Spasm Sensor for Hand Rehabilitation Exoskeleton. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-8.	2.4	3
78	Laparoscopic Robot Design and Kinematic Validation. , 2006, , .		2
79	A method of target recognition from remote sensing images. , 2009, , .		2
80	Automatic Identification of the Reference System Based on the Fourth Ventricular Landmarks in T1-weighted MR Images. Academic Radiology, 2010, 17, 67-74.	1.3	2
81	Dynamic simulation and analysis for bolt and nut mating of dual arm robot. , 2012, , .		2
82	Motion planning and experiments validation for a laparoscopic robot. , 2012, , .		2
83	Fuzzy based velocity constraints of virtual fixtures in tele-robotic surgery. , 2014, , .		2
84	An Unfixed-elasticity Mass Spring Model based simulation for soft tissue deformation. , 2014, , .		2
85	Dynamics analysis of bionic parallel joint mechanism for the snake robot. , 2016, , .		2
86	How do the compliant legs affect walking stability. , 2017, , .		2
87	Dimensional synthesis and concept design of a novel minimally invasive surgical robot. Robotica, 2018, 36, 715-737.	1.3	2
88	Mechanical Design of a 4-DOF Minimally Invasive Surgical Instrument. , 2019, , .		2
89	Control of the Two-wheeled Inverted Pendulum (TWIP) Robot Moving on the Continuous Uneven Ground. , 2019, , .		2
90	Model Learning for Two-Wheeled Robot Self-Balance Control. , 2019, , .		2

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91	Global motion planning and redundancy resolution for large objects manipulation by dual redundant robots with closed kinematics. Robotica, 2022, 40, 1125-1150.	1.3	2
92	Mix Frame Visual Servo Control Framework for Autonomous Assistive Robotic Arms. Sensors, 2022, 22, 642.	2.1	2
93	Force and Microstructure Variation of SLM Prepared AlMgSc Samples during Three-Point Bending. Materials, 2022, 15, 437.	1.3	2
94	Buffering Performance Analysis of an Ostrich-like Leg Based on a Seven-Link Parallel Mechanism. Machines, 2022, 10, 306.	1.2	2
95	Avoiding Static and Dynamic Objects in Navigation. , 2006, , .		1
96	A Navigation Strategy based on Global Geographical Planning and Local Feature Positioning for Mobile Robot in Large Unknown Environment. , 0, , .		1
97	A framework for automatic construction of 3D PDM from segmented volumetric neuroradiological data sets. Computer Methods and Programs in Biomedicine, 2010, 97, 199-210.	2.6	1
98	A miniature 3-axis distal force sensor for tissue palpation during minimally invasive surgery. , 2013, , .		1
99	Dynamic modeling and analysis of A 3-DOF parallel haptic device. , 2013, , .		1
100	Preoperative position planning strategy for laparoscopic robot. , 2013, , .		1
101	Design of a novel surgical instrument for minimally invasive robotic surgery. , 2014, , .		1
102	Design and analysis of a force reflection master manipulator for minimally invasive surgical robot. , 2014, , .		1
103	Design of passive joint in minimally invasive surgical robot. , 2014, , .		1
104	Safe path planning for free-floating space robot to approach noncooperative spacecraft. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2018, 232, 1258-1271.	0.7	1
105	Research on Compliance Control for the single Joint of a Hydraulic Legged Robot. , 2018, , .		1
106	For Prostate MRI Segmentation: A Prior-shape-based Level Set Model Combined with Gradient and Regional Information. , 2018, , .		1
107	Surgical Instruments Motion Safety Constraint Based on Haptic Virtual Fixture. , 2019, , .		1
108	Development of a Novel Hand-eye Coordination Algorithm for Robot Assisted Minimally Invasive Surgery. , 2019, , .		1

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109	Extrinsic Calibration Between a Stereo System and a 3D LIDAR. , 2019, , .		1
110	Real-Time Pixel-Wise Grasp Detection Based on RGB-D Feature Dense Fusion. , 2021, , .		1
111	Design and Control of a Hydraulic Driven Robotic Gripper. , 2021, , .		1
112	A WHEELED WALL-CLIMBING ROBOT WITH A CLIMBING LEG. , 2007, , .		0
113	A Novel Interactive Volume-Exploring Method for Medical Data Based on Texture-Mapping Techniques. , 2007, , .		0
114	Kinematics and simulations of space manipulator in three work modes. , 2010, , .		0
115	Point stabilization of mobile robots by genetic sliding mode approach with neural dynamics model on uneven surface. , 2012, , .		0
116	Optimization and design of remote center motion mechanism of Minimally Invasive Surgical robotics. , 2014, , .		0
117	Video system design of a miniature cable-free robot for LESS. , 2014, , .		0
118	Mechanical design of wireless in vivo robot unit for surgical vision. , 2014, , .		0
119	Active/passive walking strategy for a biped robot using CPG with sensory interaction. , 2014, , .		0
120	A Fast Automatic Segmentation Method Based on Improved Hammer Elastic Registration. , 2018, , .		0
121	Position Control and Vibration Suppression for Flexible-Joint Surgical Robot. , 2018, , .		0
122	A Novel Robot System Assisting Non-invasive Positive Pressure Ventilation. , 2018, , .		0
123	Hybrid Analog/Digital Control of Bilateral Teleoperation Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2018, 140, .	0.9	0
124	Gain Scheduling Control of Wheel-Legged Robot LPV system Based on HOSVD. , 2019, , .		0
125	Dynamic Objects Detection Based on Stereo Visual Inertial System in Highly Dynamic Environment. , 2019, , .		0
126	Modeling and Control of a Two-wheel Mobile Robot With Auxiliary Arms. , 2019, , .		0

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127	A Novel Visual Odometer Assisted Pose Tracking Method for Mobile Robots. , 2019, , .		0