

Hongliang Ren

List of Publications by Year in descending order

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Version: 2024-02-01

411
papers

8,682
citations

38660

50
h-index

76769

74
g-index

418
all docs

418
docs citations

418
times ranked

7712
citing authors

#	ARTICLE	IF	CITATIONS
1	Finite Time Fault Tolerant Control for Robot Manipulators Using Time Delay Estimation and Continuous Nonsingular Fast Terminal Sliding Mode Control. IEEE Transactions on Cybernetics, 2017, 47, 1681-1693.	6.2	332
2	Shape Sensing Techniques for Continuum Robots in Minimally Invasive Surgery: A Survey. IEEE Transactions on Biomedical Engineering, 2017, 64, 1665-1678.	2.5	262
3	Fully organic compliant dry electrodes self-adhesive to skin for long-term motion-robust epidermal biopotential monitoring. Nature Communications, 2020, 11, 4683.	5.8	245
4	Hydrogel Actuators and Sensors for Biomedical Soft Robots: Brief Overview with Impending Challenges. Biomimetics, 2018, 3, 15.	1.5	164
5	Investigation of Attitude Tracking Using an Integrated Inertial and Magnetic Navigation System for Hand-Held Surgical Instruments. IEEE/ASME Transactions on Mechatronics, 2012, 17, 210-217.	3.7	150
6	Kinematic comparison of surgical tendon-driven manipulators and concentric tube manipulators. Mechanism and Machine Theory, 2017, 107, 148-165.	2.7	135
7	Target recognition in synthetic aperture radar images via non-negative matrix factorisation. IET Radar, Sonar and Navigation, 2015, 9, 1376-1385.	0.9	121
8	ISLES 2016 and 2017-Benchmarking Ischemic Stroke Lesion Outcome Prediction Based on Multispectral MRI. Frontiers in Neurology, 2018, 9, 679.	1.1	117
9	A fuzzy rough number-based AHP-TOPSIS for design concept evaluation under uncertain environments. Applied Soft Computing Journal, 2020, 91, 106228.	4.1	102
10	A Review of Printable Flexible and Stretchable Tactile Sensors. Research, 2019, 2019, 3018568.	2.8	100
11	Wireless T ₃ C ₂ T ₃ MXene Strain Sensor with Ultrahigh Sensitivity and Designated Working Windows for Soft Exoskeletons. ACS Nano, 2020, 14, 11860-11875.	7.3	99
12	A novel constrained wire-driven flexible mechanism and its kinematic analysis. Mechanism and Machine Theory, 2016, 95, 59-75.	2.7	98
13	Stretchable Graphene Pressure Sensors with Shar-Pei-like Hierarchical Wrinkles for Collision-Aware Surgical Robotics. ACS Applied Materials & Interfaces, 2019, 11, 10226-10236.	4.0	98
14	Topology Optimized Design, Fabrication, and Characterization of a Soft Cable-Driven Gripper. IEEE Robotics and Automation Letters, 2018, 3, 2463-2470.	3.3	96
15	Development of a Multi-Channel Concentric Tube Robotic System With Active Vision for Transnasal Nasopharyngeal Carcinoma Procedures. IEEE Robotics and Automation Letters, 2016, 1, 1172-1178.	3.3	95
16	Fabricating biomedical origami: a state-of-the-art review. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 2023-2032.	1.7	95
17	Electromagnetic Positioning for Tip Tracking and Shape Sensing of Flexible Robots. IEEE Sensors Journal, 2015, 15, 4565-4575.	2.4	94
18	6-D Magnetic Localization and Orientation Method for an Annular Magnet Based on a Closed-Form Analytical Model. IEEE Transactions on Magnetics, 2014, 50, 1-11.	1.2	90

#	ARTICLE	IF	CITATIONS
19	Self-Correction of Commutation Point for High-Speed Sensorless BLDC Motor With Low Inductance and Nonideal Back EMF. IEEE Transactions on Power Electronics, 2017, 32, 642-651.	5.4	89
20	A Miniature Soft Robotic Manipulator Based on Novel Fabrication Methods. IEEE Robotics and Automation Letters, 2016, 1, 617-623.	3.3	83
21	Real-Time Shape Estimation for Wire-Driven Flexible Robots With Multiple Bending Sections Based on Quadratic Bézier Curves. IEEE Sensors Journal, 2015, 15, 6326-6334.	2.4	82
22	A Minimal POE-Based Model for Robotic Kinematic Calibration With Only Position Measurements. IEEE Transactions on Automation Science and Engineering, 2015, 12, 758-763.	3.4	80
23	Hybrid Tele-Manipulation System Using a Sensorized 3-D-Printed Soft Robotic Gripper and a Soft Fabric-Based Haptic Glove. IEEE Robotics and Automation Letters, 2017, 2, 880-887.	3.3	80
24	A bioinspired analogous nerve towards artificial intelligence. Nature Communications, 2020, 11, 268.	5.8	80
25	Multisensor Data Fusion in an Integrated Tracking System for Endoscopic Surgery. IEEE Transactions on Information Technology in Biomedicine, 2012, 16, 106-111.	3.6	78
26	Game-Theoretic Modeling of Joint Topology Control and Power Scheduling for Wireless Heterogeneous Sensor Networks. IEEE Transactions on Automation Science and Engineering, 2009, 6, 610-625.	3.4	73
27	A High-Sensitivity Tactile Sensor Array Based on Fiber Bragg Grating Sensing for Tissue Palpation in Minimally Invasive Surgery. IEEE/ASME Transactions on Mechatronics, 2018, 23, 2306-2315.	3.7	73
28	Deep Reinforcement Learning for Soft, Flexible Robots: Brief Review with Impending Challenges. Robotics, 2019, 8, 4.	2.1	73
29	Finding the Kinematic Base Frame of a Robot by Hand-Eye Calibration Using 3D Position Data. IEEE Transactions on Automation Science and Engineering, 2017, 14, 314-324.	3.4	72
30	Computer-Assisted Transoral Surgery with Flexible Robotics and Navigation Technologies: A Review of Recent Progress and Research Challenges. Critical Reviews in Biomedical Engineering, 2013, 41, 365-391.	0.5	71
31	Shape reconstruction for wire-driven flexible robots based on Bézier curve and electromagnetic positioning. Mechatronics, 2015, 29, 28-35.	2.0	71
32	Overall survival prediction in glioblastoma multiforme patients from volumetric, shape and texture features using machine learning. Surgical Oncology, 2018, 27, 709-714.	0.8	70
33	Real-Time Instrument Segmentation in Robotic Surgery Using Auxiliary Supervised Deep Adversarial Learning. IEEE Robotics and Automation Letters, 2019, 4, 2188-2195.	3.3	70
34	Robust Fault-Tolerant Control for a Class of Second-Order Nonlinear Systems Using an Adaptive Third-Order Sliding Mode Control. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2016, , 1-8.	5.9	69
35	Power Adaptive Localization Algorithm for Wireless Sensor Networks Using Particle Filter. IEEE Transactions on Vehicular Technology, 2009, 58, 2498-2508.	3.9	66
36	Active Balancing Control of AMB-Rotor Systems Using a Phase-Shift Notch Filter Connected in Parallel Mode. IEEE Transactions on Industrial Electronics, 2016, 63, 3777-3785.	5.2	64

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37	Simultaneous Hand-Eye, Tool-Flange, and Robot-Robot Calibration for Comanipulation by Solving the $\mathbf{AXB=YZ}$ Problem. IEEE Transactions on Robotics, 2016, 32, 413-428.	7.3	63
38	Type-2 Fuzzy Modeling and Control for Bilateral Teleoperation System With Dynamic Uncertainties and Time-Varying Delays. IEEE Transactions on Industrial Electronics, 2018, 65, 447-459.	5.2	63
39	Motion Planning Based on Learning From Demonstration for Multiple-Segment Flexible Soft Robots Actuated by Electroactive Polymers. IEEE Robotics and Automation Letters, 2016, 1, 391-398.	3.3	60
40	Passive Markers for Tracking Surgical Instruments in Real-Time 3-D Ultrasound Imaging. IEEE Transactions on Medical Imaging, 2012, 31, 563-575.	5.4	59
41	Optimizing Double-Network Hydrogel for Biomedical Soft Robots. Soft Robotics, 2017, 4, 191-201.	4.6	59
42	Flexible Robot With Variable Stiffness in Transoral Surgery. IEEE/ASME Transactions on Mechatronics, 2020, 25, 1-10.	3.7	58
43	A Robotic System With Multichannel Flexible Parallel Manipulators for Single Port Access Surgery. IEEE Transactions on Industrial Informatics, 2019, 15, 1678-1687.	7.2	57
44	Intensity-Based Visual Servoing for Instrument and Tissue Tracking in 3D Ultrasound Volumes. IEEE Transactions on Automation Science and Engineering, 2015, 12, 367-371.	3.4	56
45	Three-Dimensional Catheter Distal Force Sensing for Cardiac Ablation Based on Fiber Bragg Grating. IEEE/ASME Transactions on Mechatronics, 2018, 23, 2316-2327.	3.7	56
46	Radiation Characteristics of Ingestible Wireless Devices in Human Intestine Following Radio Frequency Exposure at 430, 800, 1200, and 2400 MHz. IEEE Transactions on Antennas and Propagation, 2009, 57, 2418-2428.	3.1	55
47	Fault-Tolerant Inverter for High-Speed Low-Inductance BLDC Drives in Aerospace Applications. IEEE Transactions on Power Electronics, 2017, 32, 2452-2463.	5.4	55
48	Multifunctional metallic backbones for origami robotics with strain sensing and wireless communication capabilities. Science Robotics, 2019, 4, .	9.9	53
49	Sensor Fusion of Leap Motion Controller and Flex Sensors Using Kalman Filter for Human Finger Tracking. IEEE Sensors Journal, 2018, 18, 2042-2049.	2.4	52
50	Treatment Planning and Image Guidance for Radiofrequency Ablation of Large Tumors. IEEE Journal of Biomedical and Health Informatics, 2014, 18, 920-928.	3.9	51
51	Development of a compact continuum tubular robotic system for nasopharyngeal biopsy. Medical and Biological Engineering and Computing, 2017, 55, 403-417.	1.6	51
52	An Efficient Magnetic Tracking Method Using Uniaxial Sensing Coil. IEEE Transactions on Magnetics, 2014, 50, 1-7.	1.2	50
53	A Novel 4-DOF Hybrid Magnetic Bearing for DGMSCMG. IEEE Transactions on Industrial Electronics, 2017, 64, 2196-2204.	5.2	50
54	Single-Motor Controlled Tendon-Driven Peristaltic Soft Origami Robot. Journal of Mechanisms and Robotics, 2018, 10, .	1.5	50

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55	No-reference blur assessment based on edge modeling. <i>Journal of Visual Communication and Image Representation</i> , 2015, 29, 1-7.	1.7	49
56	Evolution and Current Applications of Robot-Assisted Fracture Reduction: A Comprehensive Review. <i>Annals of Biomedical Engineering</i> , 2020, 48, 203-224.	1.3	49
57	Evolution of robotic systems for transoral head and neck surgery. <i>Oral Oncology</i> , 2018, 87, 82-88.	0.8	47
58	Data-driven methods towards learning the highly nonlinear inverse kinematics of tendon-driven surgical manipulators. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2017, 13, e1774.	1.2	46
59	A Novel Fiber Bragg Grating Displacement Sensor With a Sub-Micrometer Resolution. <i>IEEE Photonics Technology Letters</i> , 2017, 29, 1199-1202.	1.3	44
60	Design, characterization and applications of a novel soft actuator driven by flexible shafts. <i>Mechanism and Machine Theory</i> , 2018, 122, 197-218.	2.7	44
61	Brain Tumor Segmentation and Survival Prediction Using 3D Attention UNet. <i>Lecture Notes in Computer Science</i> , 2020, , 262-272.	1.0	43
62	Biogeography-based particle swarm optimization with fuzzy elitism and its applications to constrained engineering problems. <i>Engineering Optimization</i> , 2014, 46, 1465-1484.	1.5	42
63	ROBOTICS IN NATURAL ORIFICE TRANSLUMINAL ENDOSCOPIC SURGERY. <i>Journal of Mechanics in Medicine and Biology</i> , 2013, 13, 1350044.	0.3	41
64	Stretchable and Sensitive Silver Nanowire-Hydrogel Strain Sensors for Proprioceptive Actuation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 37816-37829.	4.0	41
65	Physiological information acquisition through wireless biomedical sensor networks. , 0, , .		40
66	A Compliant Transoral Surgical Robotic System Based on a Parallel Flexible Mechanism. <i>Annals of Biomedical Engineering</i> , 2019, 47, 1329-1344.	1.3	40
67	A High-Resolution Triaxial Catheter Tip Force Sensor With Miniature Flexure and Suspended Optical Fibers. <i>IEEE Transactions on Industrial Electronics</i> , 2020, 67, 5101-5111.	5.2	40
68	A Novel Tele-Operated Flexible Robot Targeted for Minimally Invasive Robotic Surgery. <i>Engineering</i> , 2015, 1, 073-078.	3.2	39
69	Applications of Wireless Power Transfer in Medicine: State-of-the-Art Reviews. <i>Annals of Biomedical Engineering</i> , 2019, 47, 22-38.	1.3	39
70	Three-Dimensional Intravascular Reconstruction Techniques Based on Intravascular Ultrasound: A Technical Review. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2018, 22, 806-817.	3.9	38
71	A diaphragm type fiber Bragg grating vibration sensor based on transverse property of optical fiber with temperature compensation. <i>IEEE Sensors Journal</i> , 2016, , 1-1.	2.4	37
72	Design of a Novel Flexible Endoscope-Cardioscope. <i>Journal of Mechanisms and Robotics</i> , 2016, 8, .	1.5	37

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73	A Cable-Driven Flexible Robotic Grasper With Lego-Like Modular and Reconfigurable Joints. IEEE/ASME Transactions on Mechatronics, 2017, 22, 2757-2767.	3.7	37
74	A High-Sensitivity Fiber Bragg Grating Displacement Sensor Based on Transverse Property of a Tensioned Optical Fiber Configuration and Its Dynamic Performance Improvement. IEEE Sensors Journal, 2017, 17, 5840-5848.	2.4	36
75	Crumpling and Unfolding of Montmorillonite Hybrid Nanocoatings as Stretchable Flame-Retardant Skin. Small, 2018, 14, e1800596.	5.2	36
76	A Flexible Fabrication Approach Toward the Shape Engineering of Microscale Soft Pneumatic Actuators. IEEE Robotics and Automation Letters, 2017, 2, 165-170.	3.3	35
77	Advances in Haptics, Tactile Sensing, and Manipulation for Robot-Assisted Minimally Invasive Surgery, Noninvasive Surgery, and Diagnosis. Journal of Robotics, 2012, 2012, 1-14.	0.6	34
78	Applications of Robotics, Artificial Intelligence, and Digital Technologies During COVID-19: A Review. Disaster Medicine and Public Health Preparedness, 2022, 16, 1634-1644.	0.7	34
79	SOFT ROBOTICS WITH COMPLIANCE AND ADAPTATION FOR BIOMEDICAL APPLICATIONS AND FORTHCOMING CHALLENGES. International Journal of Robotics and Automation, 2018, 33, .	0.1	34
80	Statics modeling of an underactuated wire-driven flexible robotic arm. , 2014, , .		33
81	Fault Diagnosis in Image-Based Visual Servoing With Eye-in-Hand Configurations Using Kalman Filter. IEEE Transactions on Industrial Informatics, 2016, 12, 1998-2007.	7.2	33
82	Depth Estimation of Hard Inclusions in Soft Tissue by Autonomous Robotic Palpation Using Deep Recurrent Neural Network. IEEE Transactions on Automation Science and Engineering, 2020, 17, 1791-1799.	3.4	33
83	Towards simultaneous coordinate calibrations for cooperative multiple robots. , 2014, , .		32
84	Surgical Instrument Tracking By Multiple Monocular Modules and a Sensor Fusion Approach. IEEE Transactions on Automation Science and Engineering, 2019, 16, 629-639.	3.4	32
85	Disposable FBG-Based Tridirectional Force/Torque Sensor for Aspiration Instruments in Neurosurgery. IEEE Transactions on Industrial Electronics, 2020, 67, 3236-3247.	5.2	32
86	Coverage planning in computer-assisted ablation based on Genetic Algorithm. Computers in Biology and Medicine, 2014, 49, 36-45.	3.9	30
87	Safety-Enhanced Motion Planning for Flexible Surgical Manipulator Using Neural Dynamics. IEEE Transactions on Control Systems Technology, 2017, 25, 1711-1723.	3.2	30
88	A Millinewton Resolution Fiber Bragg Grating-Based Catheter Two-Dimensional Distal Force Sensor for Cardiac Catheterization. IEEE Sensors Journal, 2018, 18, 1539-1546.	2.4	30
89	Safety-Enhanced Model-Free Visual Servoing for Continuum Tubular Robots Through Singularity Avoidance in Confined Environments. IEEE Access, 2019, 7, 21539-21558.	2.6	30
90	Bioinspired Soft Actuators for Eyeball Motions in Humanoid Robots. IEEE/ASME Transactions on Mechatronics, 2019, 24, 100-108.	3.7	29

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91	Origami-Layer-Jamming Deployable Surgical Retractor With Variable Stiffness and Tactile Sensing. Journal of Mechanisms and Robotics, 2020, 12, .	1.5	29
92	Towards Occlusion-Free Surgical Instrument Tracking: A Modular Monocular Approach and an Agile Calibration Method. IEEE Transactions on Automation Science and Engineering, 2015, 12, 588-595.	3.4	28
93	Kinematic Analysis and Motion Control of Wheeled Mobile Robots in Cylindrical Workspaces. IEEE Transactions on Automation Science and Engineering, 2016, 13, 1207-1214.	3.4	28
94	Origami-inspired bi-directional soft pneumatic actuator with integrated variable stiffness mechanism. , 2017, , .		28
95	Simultaneous Robot-World, Sensor-Tip, and Kinematics Calibration of an Underactuated Robotic Hand With Soft Fingers. IEEE Access, 2018, 6, 22705-22715.	2.6	28
96	Graphene Oxide-Enabled Synthesis of Metal Oxide Origamis for Soft Robotics. ACS Nano, 2019, 13, 5410-5420.	7.3	28
97	MR-Conditional SMA-Based Origami Joint. IEEE/ASME Transactions on Mechatronics, 2019, 24, 883-888.	3.7	28
98	Biologically Inspired Approaches for Wireless Sensor Networks. , 2006, , .		27
99	Corrections to, "Radiation Characteristics of Ingestible Wireless Devices in Human Intestine Following Radio Frequency Exposure at 430, 800, 1200, and 2400 MHz" [Aug 09]. IEEE Transactions on Antennas and Propagation, 2010, 58, 2488-2488.	3.1	27
100	Tracking control design of interval type-2 polynomial-fuzzy-model-based systems with time-varying delay. Engineering Applications of Artificial Intelligence, 2018, 75, 76-87.	4.3	27
101	Hydrogel-matrix encapsulated Nitinol actuation with self-cooling mechanism. RSC Advances, 2019, 9, 34244-34255.	1.7	27
102	Multilateral Teleoperation With New Cooperative Structure Based on Reconfigurable Robots and Type-2 Fuzzy Logic. IEEE Transactions on Cybernetics, 2019, 49, 2845-2859.	6.2	27
103	Tubular Enhanced Geodesic Active Contours for continuum robot detection using 3D ultrasound. , 2012, , .		26
104	Layer-Jamming Suction Grippers With Variable Stiffness. Journal of Mechanisms and Robotics, 2019, 11, .	1.5	26
105	Distributed Curvature Sensing and Shape Reconstruction for Soft Manipulators With Irregular Cross Sections Based on Parallel Dual-FBG Arrays. IEEE/ASME Transactions on Mechatronics, 2020, 25, 406-417.	3.7	26
106	Dynamic decoupling control of DGCMG gimbal system via state feedback linearization. Mechatronics, 2016, 36, 127-135.	2.0	25
107	Towards transferring skills to flexible surgical robots with programming by demonstration and reinforcement learning. , 2016, , .		25
108	Real-Time 6DOF Pose Estimation of Endoscopic Instruments Using Printable Markers. IEEE Sensors Journal, 2019, 19, 2338-2346.	2.4	25

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109	Reaction Force Mapping by 3-Axis Tactile Sensing With Arbitrary Angles for Tissue Hard-Inclusion Localization. IEEE Transactions on Biomedical Engineering, 2021, 68, 26-35.	2.5	25
110	Detection of curved robots using 3D ultrasound. , 2011, 2011, 2083-2089.		24
111	Ultrasound-Assisted Guidance With Force Cues for Intravascular Interventions. IEEE Transactions on Automation Science and Engineering, 2019, 16, 253-260.	3.4	24
112	Statistical Model of Total Target Registration Error in Image-Guided Surgery. IEEE Transactions on Automation Science and Engineering, 2020, 17, 151-165.	3.4	24
113	Radiogenomics model for overall survival prediction of glioblastoma. Medical and Biological Engineering and Computing, 2020, 58, 1767-1777.	1.6	24
114	Glioma Survival Analysis Empowered With Data Engineeringâ€”A Survey. IEEE Access, 2021, 9, 43168-43191.	2.6	24
115	Intraoperative magnetic resonance imagingâ€”conditional robotic devices for therapy and diagnosis. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2014, 228, 303-318.	1.0	23
116	Electromagnetically Enhanced Soft and Flexible Bend Sensor: A Quantitative Analysis With Different Cores. IEEE Sensors Journal, 2018, 18, 3580-3589.	2.4	23
117	An image based targeting method to guide a tentacle-like curvilinear concentric tube robot. , 2014, , .		21
118	An Improved Magnetic Tracking Method Using Rotating Uniaxial Coil With Sparse Points and Closed Form Analytic Solution. IEEE Sensors Journal, 2014, 14, 3585-3592.	2.4	21
119	Endoscope Navigation and 3D Reconstruction of Oral Cavity by Visual SLAM with Mitigated Data Scarcity. , 2018, , .		21
120	Real-time surgical instrument tracking in robot-assisted surgery using multi-domain convolutional neural network. Healthcare Technology Letters, 2019, 6, 159-164.	1.9	21
121	A Miniature Manipulator With Variable Stiffness Towards Minimally Invasive Transluminal Endoscopic Surgery. IEEE Robotics and Automation Letters, 2021, 6, 5541-5548.	3.3	21
122	Stretchable Capacitive Pressure Sensing Sleeve Deployable onto Catheter Balloons towards Continuous Intra-Abdominal Pressure Monitoring. Biosensors, 2021, 11, 156.	2.3	21
123	Learning Where to Look While Tracking Instruments in Robot-Assisted Surgery. Lecture Notes in Computer Science, 2019, , 412-420.	1.0	21
124	Learning and Reasoning with the Graph Structure Representation in Robotic Surgery. Lecture Notes in Computer Science, 2020, , 627-636.	1.0	21
125	A Paired-Orientation Alignment Problem in a Hybrid Tracking System for Computer Assisted Surgery. Journal of Intelligent and Robotic Systems: Theory and Applications, 2011, 63, 151-161.	2.0	20
126	Marker-Based Surgical Instrument Tracking Using Dual Kinect Sensors. IEEE Transactions on Automation Science and Engineering, 2013, , 1-4.	3.4	20

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127	A Skull-Mounted Robot with a Compact and Lightweight Parallel Mechanism for Positioning in Minimally Invasive Neurosurgery. <i>Annals of Biomedical Engineering</i> , 2018, 46, 1465-1478.	1.3	20
128	Soft Tactile Sensors With Inkjet-Printing Conductivity and Hydrogel Biocompatibility for Retractors in Cadaveric Surgical Trials. <i>IEEE Sensors Journal</i> , 2018, 18, 9840-9847.	2.4	20
129	Ultrasound needle segmentation and trajectory prediction using excitation network. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2020, 15, 437-443.	1.7	20
130	Fabrication and Comparative Study on Sensing Characteristics of Soft Textile-Layered Tactile Sensors. , 2017, 1, 1-4.		19
131	Dynamic Modeling and Feedforward Control of Jaw Movements Driven by Viscoelastic Artificial Muscles. <i>IEEE/ASME Transactions on Mechatronics</i> , 2019, 24, 25-35.	3.7	19
132	ST-MTL: Spatio-Temporal multitask learning model to predict scanpath while tracking instruments in robotic surgery. <i>Medical Image Analysis</i> , 2021, 67, 101837.	7.0	19
133	Motion planning of continuum tubular robots based on centerlines extracted from statistical atlas. , 2015, , .		18
134	Simultaneous Temperature Compensation and Synchronous Error Elimination for Axial Displacement Sensors Using an Auxiliary Probe. <i>IEEE Transactions on Industrial Electronics</i> , 2016, 63, 3179-3186.	5.2	18
135	Pose Characterization and Analysis of Soft Continuum Robots With Modeling Uncertainties Based on Interval Arithmetic. <i>IEEE Transactions on Automation Science and Engineering</i> , 2019, 16, 570-584.	3.4	18
136	Evaluation of tumor shape features for overall survival prognosis in glioblastoma multiforme patients. <i>Surgical Oncology</i> , 2019, 29, 178-183.	0.8	18
137	A Flexible Transoral Robot Towards COVID-19 Swab Sampling. <i>Frontiers in Robotics and AI</i> , 2021, 8, 612167.	2.0	18
138	Glioblastoma multiforme prognosis: MRI missing modality generation, segmentation and radiogenomic survival prediction. <i>Computerized Medical Imaging and Graphics</i> , 2021, 91, 101906.	3.5	18
139	Magnetically Steerable Serial and Parallel Structures by Mold-Free Origami Templating and Domain Setting. <i>Advanced Materials Technologies</i> , 2022, 7, .	3.0	18
140	A novel constrained tendon-driven serpentine manipulator. , 2015, , .		17
141	Development and modeling of an electromagnetic energy harvester from pressure fluctuations. <i>Mechatronics</i> , 2018, 49, 36-45.	2.0	17
142	Soft Robotics in Medical Applications. <i>Journal of Medical Robotics Research</i> , 2018, 03, 1841006.	1.0	17
143	ICHNet: Intracerebral Hemorrhage (ICH) Segmentation Using Deep Learning. <i>Lecture Notes in Computer Science</i> , 2019, , 456-463.	1.0	17
144	Multiphysics Simulation of Magnetically Actuated Robotic Origami Worms. <i>IEEE Robotics and Automation Letters</i> , 2021, 6, 4923-4930.	3.3	17

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145	Rate Control to Reduce Bioeffects in Wireless Biomedical Sensor Networks. , 2006, , .		16
146	Soft oral interventional rehabilitation robot based on low-profile soft pneumatic actuator. , 2015, , .		16
147	A randomized controlled trial on a nurse-led smartphone-based self-management programme for people with poorly controlled type 2 diabetes: A study protocol. Journal of Advanced Nursing, 2018, 74, 190-200.	1.5	16
148	Diversified and Untethered Motion Generation Via Crease Patterning from Magnetically Actuated Caterpillar-Inspired Origami Robot. IEEE/ASME Transactions on Mechatronics, 2021, 26, 1678-1688.	3.7	16
149	Hydrogel-Shielded Soft Tactile Sensor for Biocompatible Drug Delivery Monitoring. Journal of Medical Devices, Transactions of the ASME, 2019, 13, .	0.4	16
150	Hierarchical Recognition System for Target Recognition from Sparse Representations. Mathematical Problems in Engineering, 2015, 2015, 1-6.	0.6	15
151	TTRE: A new type of error to evaluate the accuracy of a paired-point rigid registration. , 2017, , .		15
152	Estimation of surgical tool-tip tracking error distribution in coordinate reference frame involving pivot calibration uncertainty. Healthcare Technology Letters, 2017, 4, 193-198.	1.9	15
153	Glioma Prognosis: Segmentation of the Tumor and Survival Prediction Using Shape, Geometric and Clinical Information. Lecture Notes in Computer Science, 2019, , 142-153.	1.0	15
154	Class-Incremental Domain Adaptation with Smoothing and Calibration for Surgical Report Generation. Lecture Notes in Computer Science, 2021, , 269-278.	1.0	15
155	Drift analysis of mutation operations for biogeography-based optimization. Soft Computing, 2015, 19, 1881-1892.	2.1	14
156	A compliant modular robotic hand with fabric force sensor for multiple versatile grasping modes. , 2016, , .		14
157	Automate surgical tasks for a flexible Serpentine Manipulator via learning actuation space trajectory from demonstration. , 2016, , .		14
158	Analytical Computation for AC Resistance and Reactance of Electric Machine Windings in Ferromagnetic Slots. IEEE Transactions on Energy Conversion, 2018, 33, 1855-1864.	3.7	14
159	AP-MTL: Attention Pruned Multi-task Learning Model for Real-time Instrument Detection and Segmentation in Robot-assisted Surgery. , 2020, , .		14
160	Portable Body-Attached Positioning Mechanism Toward Robotic Needle Intervention. IEEE/ASME Transactions on Mechatronics, 2020, 25, 1105-1116.	3.7	14
161	Learning Domain Adaptation with Model Calibration for Surgical Report Generation in Robotic Surgery. , 2021, , .		14
162	Global-Reasoned Multi-Task Learning Model for Surgical Scene Understanding. IEEE Robotics and Automation Letters, 2022, 7, 3858-3865.	3.3	13

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163	A preliminary study of motion control patterns for biorobotic spiders. , 2014, , .		12
164	Model-free image guidance for intelligent tubular robots with pre-clinical feasibility study: Towards minimally invasive trans-orifice surgery. , 2015, , .		12
165	Analysis of Different Sparsity Methods in Constrained RBM for Sparse Representation in Cognitive Robotic Perception. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 80, 121-132.	2.0	12
166	Preliminary Design and Performance Test of Tendon-Driven Origami-Inspired Soft Peristaltic Robot. , 2018, , .		12
167	Inverse Kinematics with a Geometrical Approximation for Multi-Segment Flexible Curvilinear Robots. Robotics, 2019, 8, 48.	2.1	12
168	Transcend Anthropomorphic Robotic Grasping With Modular Antagonistic Mechanisms and Adhesive Soft Modulations. IEEE Robotics and Automation Letters, 2019, 4, 2463-2470.	3.3	12
169	Additional planning with multiple objectives for reinforcement learning. Knowledge-Based Systems, 2020, 193, 105392.	4.0	12
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