Hongliang Ren

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

367 papers	5,419 citations	40 h-index	57 g-index
418 ext. papers	6,985 ext. citations	3.8 avg, IF	6.68 L-index

#	Paper	IF	Citations
367	Global-Reasoned Multi-Task Learning Model for Surgical Scene Understanding. *IEEE Robotics and Automation Letters*, **2022**, 1-1	4.2	4
366	Auto-generating of 2D tessellated crease patterns of 3D biomimetic spring origami structure. *Biomimetic Intelligence and Robotics*, **2022**, 2, 100036		0
365	An Active Magnetic Bearing With Controllable Permanent-Magnet Bias Field. *IEEE/ASME Transactions on Mechatronics*, **2022**, 1-8	5.5	
364	Chip-Less Real-Time Wireless Sensing of Endotracheal Intubation Tubes by Printing and Mounting Conformable Antenna Tag. *IEEE Robotics and Automation Letters*, **2022**, 7, 2369-2376	4.2	
363	SIRNet: Fine-Grained Surgical Interaction Recognition. *IEEE Robotics and Automation Letters*, **2022**, 1-1	4.2	1
362	Towards catheter steering using magnetic tractor beam coupling.. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2022**, 9544119221075400	1.7	0
361	Magnetically Deployable Robots Using Layered Lamina Emergent Mechanism. *Applied Sciences (Switzerland)*, **2022**, 12, 14	2.6	2
360	Deployable Tubular Mechanisms Integrated with Magnetic Anchoring and Guidance System. *Actuators*, **2022**, 11, 124	2.4	0
359	Biomimetic Incremental Domain Generalization with a Graph Network for Surgical Scene Understanding. *Biomimetics*, **2022**, 7, 68	3.7	1
358	Authors' Responses to Peer Reviews of Supporting Technologies for COVID-19 Prevention: Systemized Review *Jmirx Med*, **2022**, 3, e38693	0.2	
357	Untethered Origami Worm Robot with Diverse Multi-Leg Attachments and Responsive Motions under Magnetic Actuation. *Robotics*, **2021**, 10, 118	2.8	4
356	Concurrently bendable and rotatable continuum tubular robot for omnidirectional multi-core transurethral prostate biopsy. *Medical and Biological Engineering and Computing*, **2021**, 1	3.1	1
355	Learning Domain Adaptation with Model Calibration for Surgical Report Generation in Robotic Surgery **2021**,		5
354	Origami-Inspired Snap-through Bistability in Parallel and Curved Mechanisms Through the Inflection of Degree Four Vertexes **2021**,		5
353	Chip-Less Wireless Sensing of Kirigami Structural Morphing Under Various Mechanical Stimuli Using Home-Based Ink-Jet Printable Materials **2021**,		2
352	Strong, Ultrastretchable Hydrogel-Based Multilayered Soft Actuator Composites Enhancing Biologically Inspired Pumping Systems. *Advanced Engineering Materials*, **2021**, 23, 2170038	3.5	
351	Fully-Printable Soft Actuator with Variable Stiffness by Phase Transition and Hydraulic Regulations. *Actuators*, **2021**, 10, 269	2.4	1

350	A Tubular Dual-Roller Bending Mechanism Toward Robotic Transurethral Prostate Biopsy. *IEEE/ASME Transactions on Mechatronics*, **2021**, 26, 2483-2494	5.5	1
349	Effects of cross-flow fan on hydrodynamic and acoustic performance of underwater fan-wing thruster. *Ocean Engineering*, **2021**, 241, 110078	3.9	
348	Highly Stretchable Flame-Retardant Skin for Soft Robotics with Hydrogel-Montmorillonite-Based Translucent Matrix. *Soft Robotics*, **2021**,	9.2	1
347	Shape Tracking of Flexible Morphing Matters From Depth Images. *IEEE Sensors Journal*, **2021**, 21, 8234-8244	4	2
346	A Flexible Transoral Robot Towards COVID-19 Swab Sampling. *Frontiers in Robotics and AI*, **2021**, 8, 612167	2.8	5
345	Aligning 3D Curve With Surface Using Tangent and Normal Vectors for Computer-Assisted Orthopedic Surgery. *IEEE Transactions on Medical Robotics and Bionics*, **2021**, 3, 372-383	3.1	2
344	Stretchable Capacitive Pressure Sensing Sleeve Deployable onto Catheter Balloons towards Continuous Intra-Abdominal Pressure Monitoring. *Biosensors*, **2021**, 11,	5.9	11
343	Stretchable and Sensitive Silver Nanowire-Hydrogel Strain Sensors for Proprioceptive Actuation. *ACS Applied Materials & Interfaces*, **2021**, 13, 37816-37829	9.5	6
342	Glioblastoma multiforme prognosis: MRI missing modality generation, segmentation and radiogenomic survival prediction. *Computerized Medical Imaging and Graphics*, **2021**, 91, 101906	7.6	5
341	Multiphysics Simulation of Magnetically Actuated Robotic Origami Worms. *IEEE Robotics and Automation Letters*, **2021**, 6, 4923-4930	4.2	7
340	Augmented reality technology in image-guided therapy: State-of-the-art review. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2021**, 235, 1386-1398	1.7	1
339	AI-Assisted CT as a Clinical and Research Tool for COVID-19. *Frontiers in Artificial Intelligence*, **2021**, 4, 590189	3	
338	Soft Robotic Gripper Driven by Flexible Shafts for Simultaneous Grasping and In-Hand Cap Manipulation. *IEEE Transactions on Automation Science and Engineering*, **2021**, 18, 1134-1143	4.9	1
337	Feature-Guided Nonrigid 3-D Point Set Registration Framework for Image-Guided Liver Surgery: From Isotropic Positional Noise to Anisotropic Positional Noise. *IEEE Transactions on Automation Science and Engineering*, **2021**, 18, 471-483	4.9	4
336	Diversified and Untethered Motion Generation Via Crease Patterning from Magnetically Actuated Caterpillar-Inspired Origami Robot. *IEEE/ASME Transactions on Mechatronics*, **2021**, 26, 1678-1688	5.5	9
335	ST-MTL: Spatio-Temporal multitask learning model to predict scanpath while tracking instruments in robotic surgery. *Medical Image Analysis*, **2021**, 67, 101837	15.4	4
334	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	5	12
333	Class-Incremental Domain Adaptation with Smoothing and Calibration for Surgical Report Generation. *Lecture Notes in Computer Science*, **2021**, 269-278	0.9	5

332	. *IEEE Access*, **2021**, 9, 43168-43191	3.5	3
331	Omnidirectional Steerable Forceps with Flexible Joints and Skin-like Stretchable Strain Sensors. *IEEE/ASME Transactions on Mechatronics*, **2021**, 1-1	5.5	1
330	Clavicle bone segmentation from CT images using U-Net-based deep learning algorithm **2021**, 205-214		
329	A Miniature Manipulator With Variable Stiffness Towards Minimally Invasive Transluminal Endoscopic Surgery. *IEEE Robotics and Automation Letters*, **2021**, 1-1	4.2	2
328	Design and control of a novel electromagnetic actuated 3-DoFs micropositioner. *Microsystem Technologies*, **2021**, 27, 3763-3772	1.7	2
327	Deployable Telescopic Tubular Mechanisms With a Steerable Tongue Depressor Towards Self-Administered Oral Swab. *Frontiers in Robotics and AI*, **2021**, 8, 612959	2.8	3
326	U-RSNet: An unsupervised probabilistic model for joint registration and segmentation. *Neurocomputing*, **2021**, 450, 264-274	5.4	1
325	Dynamic Piezoelectric Tactile Sensor for Tissue Hardness Measurement Using Symmetrical Flexure Hinges and Anisotropic Vibration Modes. *IEEE Sensors Journal*, **2021**, 21, 17712-17722	4	5
324	Strong, Ultrastretchable Hydrogel-Based Multilayered Soft Actuator Composites Enhancing Biologically Inspired Pumping Systems. *Advanced Engineering Materials*, **2021**, 23, 2100121	3.5	2
323	Highly Stretchable and Kirigami-Structured Strain Sensors with Long Silver Nanowires of High Aspect Ratio. *Machines*, **2021**, 9, 186	2.9	3
322	Mapping Drug-Induced Neuropathy through In-Situ Motor Protein Tracking and Machine Learning. *Journal of the American Chemical Society*, **2021**, 143, 14907-14915	16.4	1
321	Applications of Robotics, Artificial Intelligence, and Digital Technologies During COVID-19: A Review. *Disaster Medicine and Public Health Preparedness*, **2021**, 1-11	2.8	11
320	RSegNet: A Joint Learning Framework for Deformable Registration and Segmentation. *IEEE Transactions on Automation Science and Engineering*, **2021**, 1-15	4.9	0
319	Identifying risk factors of intracerebral hemorrhage stability using explainable attention model. *Medical and Biological Engineering and Computing*, **2021**, 60, 337	3.1	
318	Multiple Unmanned Underwater Vehicles Consensus Control with Unmeasurable Velocity Information and Environmental Disturbances Under Switching Directed Topologies. *China Ocean Engineering*, **2020**, 34, 631-640	1.1	2
317	An inertial measurement unit tracking system for body movement in comparison with optical tracking. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2020**, 234, 728-737	1.7	3
316	Radiogenomics model for overall survival prediction of glioblastoma. *Medical and Biological Engineering and Computing*, **2020**, 58, 1767-1777	3.1	9
315	. *IEEE/ASME Transactions on Mechatronics*, **2020**, 25, 1105-1116	5.5	5

314	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	4.9	20
313	A fuzzy rough number-based AHP-TOPSIS for design concept evaluation under uncertain environments. *Applied Soft Computing Journal*, **2020**, 91, 106228	7.5	42
312	Soft-bodied flexible bending mechanism with silent shape memory alloys aiming for robotic endoscopy **2020**, 231-248		
311	EndoGoose: a flexible and steerable endoscopic forceps with actively pose-retaining bendable sections **2020**, 401-416		
310	Thermo-responsive hydrogel-based circular valve embedded with shape-memory actuators **2020**, 455-472		
309	Slender snake-like endoscopic robots in surgery **2020**, 1-17		1
308	Robotic transluminal Pan-and-Tilt Scope **2020**, 363-388		
307	Prototyping soft origami quad-bellows robots from single-bellows characterization **2020**, 19-37		3
306	Cable-driven flexible endoscope utilizing diamond-shaped perforations: FlexDiamond **2020**, 39-75		
305	Flexible steerable manipulator utilizing complementary configuration of multiple routing grooves and ball joints for stable omnidirectional bending **2020**, 77-99		
304	Modular origami joint operator to create bendable motions with multiple radii **2020**, 101-148		2
303	Handheld flexible robot with concentric tubes aiming for intraocular procedures **2020**, 149-167		2
302	Flexible robotic platform with multiple-bending tendon-driven mechanism **2020**, 269-288		
301	Force sensing in compact concentric tube mechanism with optical fibers **2020**, 327-347		
300	Electromechanical characterization of magnetic responsive and conductive soft polymer actuators **2020**, 349-361		1
299	OmniFlex: omnidirectional flexible hand-held endoscopic manipulator with spheroidal joint **2020**, 473-489		
298	Real time in-vivo miniature endoscopic surveillance system for imaging of nasopharynx. *World Journal of Otorhinolaryngology - Head and Neck Surgery*, **2020**, 6, 4-9	2.6	
297	Tendon routing and anchoring for cable-driven single-port surgical manipulators with spring backbones and luminal constraints **2020**, 169-194		

296	Compliant bending tubular mechanisms with variable groove patterns for flexible robotic drilling delivery **2020**, 195-215		
295	Tendon-driven linkage for steerable guide of flexible bending manipulation **2020**, 217-229		1
294	Comparative mechanical analysis for flexible bending manipulators with quad-tendon antagonistic pairs **2020**, 249-267		
293	Design evolution of a flexible robotic bending end-effector for transluminal explorations **2020**, 289-325		0
292	Single-port multichannel multi-degree-of-freedom robot with variable stiffness for natural orifice transluminal endoscopic surgery **2020**, 389-399		1
291	Flexible drill manipulator utilizing different rolling sliding joints for transoral drilling through the tracheal tissue **2020**, 417-454		
290	Real-time object detection and manipulation using biomimetic musculoskeletal soft robotic grasper addressing robotic fan-handling challenge **2020**, 115-141		1
289	Leader-Following Multiple Unmanned Underwater Vehicles Consensus Control under the Fixed and Switching Topologies with Unmeasurable Disturbances. *Complexity*, **2020**, 2020, 1-26	1.6	2
288	Ultrasound needle segmentation and trajectory prediction using excitation network. *International Journal of Computer Assisted Radiology and Surgery*, **2020**, 15, 437-443	3.9	11
287	A bioinspired analogous nerve towards artificial intelligence. *Nature Communications*, **2020**, 11, 268	17.4	34
286	Compliant Finger Exoskeleton with Telescoping Super-elastic Transmissions. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2020**, 100, 435-444	2.9	2
285	Endoscope navigation with SLAM-based registration to computed tomography for transoral surgery. *International Journal of Intelligent Robotics and Applications*, **2020**, 4, 252-263	1.7	3
284	A Bimanual Robotic Teleoperation Architecture with Anthropomorphic Hybrid Grippers for Unstructured Manipulation Tasks. *Applied Sciences (Switzerland)*, **2020**, 10, 2086	2.6	3
283	Origami-Layer-Jamming Deployable Surgical Retractor With Variable Stiffness and Tactile Sensing. *Journal of Mechanisms and Robotics*, **2020**, 12,	2.2	17
282	Needle-Size Bending Actuators Based on Controlled Nitinol Curvatures and Elastic Structures. *Journal of Mechanisms and Robotics*, **2020**, 12,	2.2	7
281	Brain Tumor Segmentation and Survival Prediction Using 3D Attention UNet. *Lecture Notes in Computer Science*, **2020**, 262-272	0.9	13
280	Learning and Reasoning with the Graph Structure Representation in Robotic Surgery. *Lecture Notes in Computer Science*, **2020**, 627-636	0.9	9
279	Radiogenomics of Glioblastoma: Identification of Radiomics Associated with Molecular Subtypes. *Lecture Notes in Computer Science*, **2020**, 229-239	0.9	2

278	Flexible Robot With Variable Stiffness in Transoral Surgery. *IEEE/ASME Transactions on Mechatronics*, **2020**, 25, 1-10	5.5	32
277	ACTORS: Adaptive and Compliant Transoral Robotic Surgery With Flexible Manipulators and Intelligent Guidance **2020**, 693-701		1
276	Nitinol actuated soft structures towards transnasal drug delivery: a pilot cadaver study. *Medical and Biological Engineering and Computing*, **2020**, 58, 611-623	3.1	8
275	Additional planning with multiple objectives for reinforcement learning. *Knowledge-Based Systems*, **2020**, 193, 105392	7.3	7
274	The Feasibility of Using a Smartphone Magnetometer for Assisting Needle Placement. *Annals of Biomedical Engineering*, **2020**, 48, 1147-1156	4.7	1
273	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	5.5	10
272	AP-MTL: Attention Pruned Multi-task Learning Model for Real-time Instrument Detection and Segmentation in Robot-assisted Surgery **2020**,		5
271	UKF-Based Motion Estimation of Cable-Driven Forceps for Robot-Assisted Surgical System. *IEEE Access*, **2020**, 8, 94912-94922	3.5	1
270	Hydrodynamic analyses of an underwater fan-wing thruster in self-driving and towing experiments. *Measurement: Journal of the International Measurement Confederation*, **2020**, 165, 108132	4.6	8
269	Cadaveric feasibility study of a teleoperated parallel continuum robot with variable stiffness for transoral surgery. *Medical and Biological Engineering and Computing*, **2020**, 58, 2063-2069	3.1	1
268	Continuum NasoXplorer manipulator with shape memory actuators for transnasal exploration **2020** , 287-316		1
267	Tunable stiffness using negative Poisson's ratio toward load-bearing continuum tubular mechanisms in medical robotics **2020**, 317-358		0
266	Pilot Study of Trans-oral Robotic-Assisted Needle Direct Tracheostomy Puncture in Patients Requiring Prolonged Mechanical Ventilation. *Frontiers in Robotics and AI*, **2020**, 7, 575445	2.8	2
265	Wireless TiCT MXene Strain Sensor with Ultrahigh Sensitivity and Designated Working Windows for Soft Exoskeletons. *ACS Nano*, **2020**, 14, 11860-11875	16.7	46
264	Pre-Clinical Proof-of-Concept Study of a Bladder Irrigation Feedback System for Gross Haematuria in a Lab Setup. *Multimodal Technologies and Interaction*, **2020**, 4, 59	1.7	0
263	Fully organic compliant dry electrodes self-adhesive to skin for long-term motion-robust epidermal biopotential monitoring. *Nature Communications*, **2020**, 11, 4683	17.4	85
262	Stent Deployment Detection Using Radio Frequency-Based Sensor and Convolutional Neural Networks. *Advanced Intelligent Systems*, **2020**, 2, 2000092	6	2
261	NESO-Based Path Following Control for Underactuated Hovercrafts with Unknown Nonlinear Uncertainties and a Safety Limit Constraint. *Applied Sciences (Switzerland)*, **2020**, 10, 5287	2.6	0

260	Radiofrequency tumor ablation system with a wireless or implantable probe. *Wireless Power Transfer*, **2020**, 7, 95-105	0.9	0
259	Comparative Study of Machine Learning Algorithms to Classify Hand Gestures from Deployable and Breathable Kirigami-Based Electrical Impedance Bracelet. *Multimodal Technologies and Interaction*, **2020**, 4, 47	1.7	1
258	The role studies of fixed-wings in underwater fan-wing thrusters. *Ocean Engineering*, **2020**, 216, 108049	3.9	2
257	Heuristic orientation adjustment for better exploration in multi-objective optimization. *Neural Computing and Applications*, **2020**, 32, 4757-4771	4.8	1
256	Statistical Model of Total Target Registration Error in Image-Guided Surgery. *IEEE Transactions on Automation Science and Engineering*, **2020**, 17, 151-165	4.9	16
255	Disposable FBG-Based Tridirectional Force/Torque Sensor for Aspiration Instruments in Neurosurgery. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 3236-3247	8.9	23
254	A High-Resolution Triaxial Catheter Tip Force Sensor With Miniature Flexure and Suspended Optical Fibers. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 5101-5111	8.9	23
253	Evolution and Current Applications of Robot-Assisted Fracture Reduction: A Comprehensive Review. *Annals of Biomedical Engineering*, **2020**, 48, 203-224	4.7	24
252	Multifunctional metallic backbones for origami robotics with strain sensing and wireless communication capabilities. *Science Robotics*, **2019**, 4,	18.6	39
251	Pinch Grasp and Suction for Delicate Object Manipulations Using Modular Anthropomorphic Robotic Gripper with Soft Layer Enhancements. *Robotics*, **2019**, 8, 67	2.8	7
250	Transferring optimal contact skills to flexible manipulators by reinforcement learning. *International Journal of Intelligent Robotics and Applications*, **2019**, 3, 326-337	1.7	2
249	Dispersion characterization of magnetic actuated needleless injections with particle image velocimetry. *Medical and Biological Engineering and Computing*, **2019**, 57, 2435-2447	3.1	1
248	Deep Reinforcement Learning for Soft, Flexible Robots: Brief Review with Impending Challenges. *Robotics*, **2019**, 8, 4	2.8	33
247	WaveCSP: a robust motor imagery classifier for consumer EEG devices. *Australasian Physical and Engineering Sciences in Medicine*, **2019**, 42, 159-168	1.9	5
246	Image Guided Navigation Utilizing Intra-operative 3D Surface Scanning to Mitigate Morphological Deformation of Surface Anatomy. *Journal of Medical and Biological Engineering*, **2019**, 39, 932-943	2.2	1
245	Inverse Kinematics with a Geometrical Approximation for Multi-Segment Flexible Curvilinear Robots. *Robotics*, **2019**, 8, 48	2.8	5
244	Evaluation of tumor shape features for overall survival prognosis in glioblastoma multiforme patients. *Surgical Oncology*, **2019**, 29, 178-183	2.5	8
243	Regression based overall survival prediction of glioblastoma multiforme patients using a single discovery cohort of multi-institutional multi-channel MR images. *Medical and Biological Engineering and Computing*, **2019**, 57, 1683-1691	3.1	3

242	Graphene Oxide-Enabled Synthesis of Metal Oxide Origamis for Soft Robotics. *ACS Nano*, **2019**, 13, 5410-5420	15.7	24
241	Transcend Anthropomorphic Robotic Grasping With Modular Antagonistic Mechanisms and Adhesive Soft Modulations. *IEEE Robotics and Automation Letters*, **2019**, 4, 2463-2470	4.2	7
240	A Compliant Transoral Surgical Robotic System Based on a Parallel Flexible Mechanism. *Annals of Biomedical Engineering*, **2019**, 47, 1329-1344	4.7	21
239	ICHNet: Intracerebral Hemorrhage (ICH) Segmentation Using Deep Learning. *Lecture Notes in Computer Science*, **2019**, 456-463	0.9	11
238	Glioma Prognosis: Segmentation of the Tumor and Survival Prediction Using Shape, Geometric and Clinical Information. *Lecture Notes in Computer Science*, **2019**, 142-153	0.9	12
237	Real-Time Instrument Segmentation in Robotic Surgery Using Auxiliary Supervised Deep Adversarial Learning. *IEEE Robotics and Automation Letters*, **2019**, 4, 2188-2195	4.2	41
236	Layer-Jamming Suction Grippers With Variable Stiffness. *Journal of Mechanisms and Robotics*, **2019**, 11,	2.2	14
235	Pose Characterization and Analysis of Soft Continuum Robots With Modeling Uncertainties Based on Interval Arithmetic. *IEEE Transactions on Automation Science and Engineering*, **2019**, 16, 570-584	4.9	11
234	Surgical Instrument Tracking By Multiple Monocular Modules and a Sensor Fusion Approach. *IEEE Transactions on Automation Science and Engineering*, **2019**, 16, 629-639	4.9	15
233	A Robotic System With Multichannel Flexible Parallel Manipulators for Single Port Access Surgery. *IEEE Transactions on Industrial Informatics*, **2019**, 15, 1678-1687	11.9	29
232	Compensating Uncertainties in Force Sensing for Robotic-Assisted Palpation. *Applied Sciences (Switzerland)*, **2019**, 9, 2573	2.6	5
231	Active Contact Enhancements With Stretchable Soft Layers and Piezoresistive Tactile Array for Robotic Grippers* **2019**,		5
230	Hydrogel-Shielded Soft Tactile Sensor for Biocompatible Drug Delivery Monitoring. *Journal of Medical Devices, Transactions of the ASME*, **2019**, 13,	1.3	12
229	A Review of Printable Flexible and Stretchable Tactile Sensors. *Research*, **2019**, 2019, 3018568	7.8	61
228	Learning Where to Look While Tracking Instruments in Robot-Assisted Surgery. *Lecture Notes in Computer Science*, **2019**, 412-420	0.9	16
227	Ischemic Stroke Lesion Segmentation Using Adversarial Learning. *Lecture Notes in Computer Science* , **2019**, 292-300	0.9	7
226	Stretchable Graphene Pressure Sensors with Shar-Pei-like Hierarchical Wrinkles for Collision-Aware Surgical Robotics. *ACS Applied Materials & Interfaces*, **2019**, 11, 10226-10236	9.5	62
225	Driving Flip Origami Motions with Thermal-Responsive Shape Memory Alloy **2019**,		5

224	Real-time surgical instrument tracking in robot-assisted surgery using multi-domain convolutional neural network. *Healthcare Technology Letters*, **2019**, 6, 159-164	1.9	7
223	Hydrogel-matrix encapsulated Nitinol actuation with self-cooling mechanism.. *RSC Advances*, **2019**, 9, 34244-34255	3.7	23
222	Multilateral Teleoperation With New Cooperative Structure Based on Reconfigurable Robots and Type-2 Fuzzy Logic. *IEEE Transactions on Cybernetics*, **2019**, 49, 2845-2859	10.2	21
221	Frequency-induced morphology alterations in microconfined biological cells. *Medical and Biological Engineering and Computing*, **2019**, 57, 819-835	3.1	3
220	. *IEEE Access*, **2019**, 7, 21539-21558	3.5	19
219	MR-Conditional SMA-Based Origami Joint. *IEEE/ASME Transactions on Mechatronics*, **2019**, 24, 883-888	5.5	22
218	Dynamic Modeling and Feedforward Control of Jaw Movements Driven by Viscoelastic Artificial Muscles. *IEEE/ASME Transactions on Mechatronics*, **2019**, 24, 25-35	5.5	12
217	Bioinspired Soft Actuators for Eyeball Motions in Humanoid Robots. *IEEE/ASME Transactions on Mechatronics*, **2019**, 24, 100-108	5.5	16
216	Applications of Wireless Power Transfer in Medicine: State-of-the-Art Reviews. *Annals of Biomedical Engineering*, **2019**, 47, 22-38	4.7	22
215	Real-Time 6DOF Pose Estimation of Endoscopic Instruments Using Printable Markers. *IEEE Sensors Journal*, **2019**, 19, 2338-2346	4	12
214	Sliding mode control based on U model for nonlinear discrete system with modeling uncertainties. *Cluster Computing*, **2019**, 22, 7471-7480	2.1	1
213	Ultrasound-Assisted Guidance With Force Cues for Intravascular Interventions. *IEEE Transactions on Automation Science and Engineering*, **2019**, 16, 253-260	4.9	19
212	Simultaneous Robot-World, Sensor-Tip, and Kinematics Calibration of an Underactuated Robotic Hand With Soft Fingers. *IEEE Access*, **2018**, 6, 22705-22715	3.5	17
211	. *IEEE Access*, **2018**, 6, 1267-1276	3.5	3
210	Preliminary development of a skull-mounted lightweight parallel robot toward minimally invasive neurosurgery **2018**,		5
209	Crumpling and Unfolding of Montmorillonite Hybrid Nanocoatings as Stretchable Flame-Retardant Skin. *Small*, **2018**, 14, e1800596	11	28
208	A Skull-Mounted Robot with a Compact and Lightweight Parallel Mechanism for Positioning in Minimally Invasive Neurosurgery. *Annals of Biomedical Engineering*, **2018**, 46, 1465-1478	4.7	13
207	Type-2 Fuzzy logic based time-delayed shared control in online-switching tele-operated and autonomous systems. *Robotics and Autonomous Systems*, **2018**, 101, 138-152	3.5	8

206	Sensor Fusion of Leap Motion Controller and Flex Sensors Using Kalman Filter for Human Finger Tracking. *IEEE Sensors Journal*, **2018**, 18, 2042-2049	4	25
205	Topology Optimized Design, Fabrication, and Characterization of a Soft Cable-Driven Gripper. *IEEE Robotics and Automation Letters*, **2018**, 3, 2463-2470	4.2	59
204	Development and modeling of an electromagnetic energy harvester from pressure fluctuations. *Mechatronics*, **2018**, 49, 36-45	3	9
203	Design, characterization and applications of a novel soft actuator driven by flexible shafts. *Mechanism and Machine Theory*, **2018**, 122, 197-218	4	30
202	Magnetically Actuated Minimally Invasive Microbots for Biomedical Applications. *Series in Bioengineering*, **2018**, 11-41	0.7	4
201	Electromagnetically Responsive Soft-Flexible Robots and Sensors for Biomedical Applications and Impending Challenges. *Series in Bioengineering*, **2018**, 43-72	0.7	9
200	Design and Analysis of Magnetic Suspension Actuators in Medical Robotics. *Series in Bioengineering*, **2018**, 105-139	0.7	0
199	Magnetic Tracking in Medical Robotics. *Series in Bioengineering*, **2018**, 141-162	0.7	1
198	An Efficient Gyro-Aided Optical Flow Estimation in Fast Rotations With Auto-Calibration. *IEEE Sensors Journal*, **2018**, 18, 3391-3399	4	2
197	Electromagnetically Enhanced Soft and Flexible Bend Sensor: A Quantitative Analysis With Different Cores. *IEEE Sensors Journal*, **2018**, 18, 3580-3589	4	15
196	A Millinewton Resolution Fiber Bragg Grating-Based Catheter Two-Dimensional Distal Force Sensor for Cardiac Catheterization. *IEEE Sensors Journal*, **2018**, 18, 1539-1546	4	19
195	Data-Defect Inspection With Kernel-Neighbor-Density-Change Outlier Factor. *IEEE Transactions on Automation Science and Engineering*, **2018**, 15, 225-238	4.9	4
194	Three-Dimensional Intravascular Reconstruction Techniques Based on Intravascular Ultrasound: A Technical Review. *IEEE Journal of Biomedical and Health Informatics*, **2018**, 22, 806-817	7.2	15
193	Low-Cost Pyrometry System With Nonlinear Multisense Partial Least Squares. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2018**, 48, 1029-1038	7.3	2
192	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	8.9	47
191	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	3.1	2
190	Estimating Dynamic Motion Parameters With an Improved Wavelet Thresholding and Inter-Scale Correlation. *IEEE Access*, **2018**, 6, 39827-39838	3.5	3
189	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	5.5	38

188	Class Balanced PixelNet for Neurological Image Segmentation **2018**,		4
187	Hydrogel Actuators and Sensors for Biomedical Soft Robots: Brief Overview with Impending Challenges. *Biomimetics*, **2018**, 3,	3.7	116
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