## Chaoyang Shi

## List of Publications by Year in descending order

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Version: 2024-02-01

38 papers	1,113 citations	471509 17 h-index	28 g-index
39	39	39	1091
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Shape Sensing Techniques for Continuum Robots in Minimally Invasive Surgery: A Survey. IEEE Transactions on Biomedical Engineering, 2017, 64, 1665-1678.	4.2	262
2	Recent advances in nanorobotic manipulation inside scanning electron microscopes. Microsystems and Nanoengineering, 2016, 2, 16024.	7.0	133
3	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.	5.8	73
4	Three-Dimensional Catheter Distal Force Sensing for Cardiac Ablation Based on Fiber Bragg Grating. IEEE/ASME Transactions on Mechatronics, 2018, 23, 2316-2327.	5.8	56
5	A High-Precision and Miniature Fiber Bragg Grating-Based Force Sensor for Tissue Palpation During Minimally Invasive Surgery. Annals of Biomedical Engineering, 2020, 48, 669-681.	2.5	54
6	A Novel Fiber Bragg Grating Displacement Sensor With a Sub-Micrometer Resolution. IEEE Photonics Technology Letters, 2017, 29, 1199-1202.	2.5	44
7	A High-Sensitivity Fiber Bragg Grating-Based Distal Force Sensor for Laparoscopic Surgery. IEEE Sensors Journal, 2020, 20, 2467-2475.	4.7	42
8	Three-Dimensional Intravascular Reconstruction Techniques Based on Intravascular Ultrasound: A Technical Review. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 806-817.	6.3	38
9	A diaphragm type fiber Bragg grating vibration sensor based on transverse property of optical fiber with temperature compensation. IEEE Sensors Journal, $2016$ , , $1-1$ .	4.7	37
10	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.	4.7	36
11	Simultaneous catheter and environment modeling for Trans-catheter Aortic Valve Implantation. , 2014, , .		35
12	Development of a Fiber Bragg Grating-Enabled Clamping Force Sensor Integrated on a Grasper for Laparoscopic Surgery. IEEE Sensors Journal, 2021, 21, 16681-16690.	4.7	32
13	A Millinewton Resolution Fiber Bragg Grating-Based Catheter Two-Dimensional Distal Force Sensor for Cardiac Catheterization. IEEE Sensors Journal, 2018, 18, 1539-1546.	4.7	30
14	Fiber Bragg Grating Sensing-Based Online Torque Detection on Coupled Bending and Torsional Vibration of Rotating Shaft. IEEE Sensors Journal, 2017, 17, 1999-2007.	4.7	26
15	A Microgripper With a Large Magnification Ratio and High Structural Stiffness Based on a Flexure-Enabled Mechanism. IEEE/ASME Transactions on Mechatronics, 2021, 26, 3076-3086.	5.8	26
16	Ultrasound-Assisted Guidance With Force Cues for Intravascular Interventions. IEEE Transactions on Automation Science and Engineering, 2019, 16, 253-260.	5.2	24
17	Development of a Distal Tri-Axial Force Sensor for Minimally Invasive Surgical Palpation. IEEE Transactions on Medical Robotics and Bionics, 2022, 4, 145-155.	3.2	24
18	Design and Experimental Validation of a Fiber Bragg Grating-Enabled Force Sensor With an Ortho-Planar Spring-Based Flexure for Surgical Needle Insertion. IEEE Transactions on Medical Robotics and Bionics, 2021, 3, 362-371.	3.2	20

#	Article	IF	CITATIONS
19	Design and Optimization of a 3D Printed Distal Flexible Joint for Endoscopic Surgery. IEEE Transactions on Medical Robotics and Bionics, 2022, 4, 38-49.	3.2	16
20	Highly Stretchable Strain Sensor With Spiral Fiber for Curvature Sensing of a Soft Pneumatic Gripper. IEEE Sensors Journal, 2021, 21, 23880-23888.	4.7	15
21	Visual Servoing-Based Nanorobotic System for Automated Electrical Characterization of Nanotubes inside SEM. Sensors, 2018, 18, 1137.	3 <b>.</b> 8	13
22	Design and Performance Investigation of a Robot-Assisted Flexible Ureteroscopy System. Applied Bionics and Biomechanics, 2021, 2021, 1-13.	1.1	11
23	A Novel Capacitive-Based Flexible Pressure Sensor Based on Stretchable Composite Electrodes and a Dielectric Elastomer With Microstructures. IEEE Access, 2020, 8, 142810-142818.	4.2	10
24	Evolutionarily Optimized Electromagnetic Sensor Measurements for Robust Surgical Navigation. IEEE Sensors Journal, 2019, 19, 10859-10868.	4.7	7
25	Design and Validation of a Miniature Fiber Bragg Grating-Enabled High-Sensitivity Torque Sensor. IEEE Sensors Journal, 2021, 21, 20027-20035.	4.7	7
26	Development of a Hybrid Force-Displacement Sensor Based on Fiber Bragg Grating for Radial Artery Pulse Waveform Measurement. IEEE Sensors Journal, 2021, 21, 20045-20054.	4.7	7
27	Jet-HR1: Stepping Posture Optimization for Bipedal Robot Over Large Ditch Based on a Ducted-fan Propulsion System. , 2018, , .		6
28	An Enhanced Hemostatic Ultrasonic Scalpel Based on the Longitudinal-Torsional Vibration Mode. IEEE Access, 2021, 9, 10951-10961.	4.2	6
29	Development of an Optic Fiber-Based Torque Sensor With a Torsion-Translation Conversion Flexure. IEEE Sensors Journal, 2022, 22, 344-351.	4.7	6
30	Marker-Based Shape Estimation of a Continuum Manipulator Using Binocular Vision and Its Error Compensation. , 2020, , .		4
31	Design and Experimental Validation of a Master-slave Robotic System for Flexible Ureteroscopy. , 2020, , .		4
32	A Model-Free Method-Based Shape Reconstruction for Cable-Driven Continuum Manipulator Using Artificial Neural Network. , 2019, , .		3
33	Automated robotic vitrification of embryos. , 2015, , .		2
34	Automated SEM-Guided AFM Scan with Dynamically Varied Scan Speed., 2018,,.		2
35	A Novel Master Manipulator with Force Feedback for Robot-Assisted Natural Orifice Transluminal Endoscopic Surgery. , 2019, , .		1
36	Operation Comfort Analysis for the Master Manipulator of the Flexible Ureteroscopy Robot Based on Joint Torque., 2020,,.		0

#	Article	IF	CITATIONS
37	A Novel Ultrasonic Scalpel Rod with Multi-Stage Gain and Minification Structures for Minimally Invasive Surgery. , 2020, , .		O
38	A Soft Pneumatic Gripper Integrated with a Flexible Capacitive Pressure Sensor., 2021,,.		0