

# Zhenglong Sun

## List of Publications by Year in descending order

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Version: 2024-02-01

76  
papers

1,227  
citations

516710

16  
h-index

454955

30  
g-index

76  
all docs

76  
docs citations

76  
times ranked

888  
citing authors

#	ARTICLE	IF	CITATIONS
1	Design and Control of a Highly Redundant Rigid-flexible Coupling Robot to Assist the COVID-19 Oropharyngeal-Swab Sampling. <i>IEEE Robotics and Automation Letters</i> , 2022, 7, 1856-1863.	5.1	39
2	A collaborative robot for COVID-19 oropharyngeal swabbing. <i>Robotics and Autonomous Systems</i> , 2022, 148, 103917.	5.1	19
3	Sampling blockchain-enabled smart city applications among South Korea, the United States and China. , 2022, 1, 53-70.		2
4	Augmented Pointing Gesture Estimation for Human-Robot Interaction. , 2022, , .		1
5	Fixed and Sliding FBG Sensors-Based Triaxial Tip Force Sensing for Cable-Driven Continuum Robots. , 2022, , .		2
6	A Soft Robotic Intervention for Gait Enhancement in Older Adults. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2021, 29, 1838-1847.	4.9	6
7	Towards Fully Autonomous Ultrasound Scanning Robot With Imitation Learning Based on Clinical Protocols. <i>IEEE Robotics and Automation Letters</i> , 2021, 6, 3671-3678.	5.1	24
8	A Novel Design of Water-Activated Variable Stiffness Endoscopic Manipulator with Safe Thermal Insulation. <i>Actuators</i> , 2021, 10, 130.	2.3	9
9	A hybrid learning-based hysteresis compensation strategy for surgical robots. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2021, 17, e2275.	2.3	1
10	Say What You Are Looking At: An Attention-Based Interactive System for Autistic Children. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 7426.	2.5	1
11	Unsupervised Monocular Depth Perception: Focusing on Moving Objects. <i>IEEE Sensors Journal</i> , 2021, 21, 27225-27237.	4.7	11
12	Long-Range Hand Gesture Recognition via Attention-based SSD Network. , 2021, , .		2
13	Learning a Skill-sequence-dependent Policy for Long-horizon Manipulation Tasks. , 2021, , .		2
14	A Hybrid Control Framework Teaching Robot to Write Chinese Characters: from Image to Handwriting. , 2021, , .		3
15	BORM: Bayesian Object Relation Model for Indoor Scene Recognition. , 2021, , .		7
16	Design of an SSVEP-based BCI Stimuli System for Attention-based Robot Navigation in Robotic Telepresence. , 2021, , .		1
17	Trajectory Tracking of Soft Continuum Robots with Unknown Models Based on Varying Parameter Recurrent Neural Networks. , 2021, , .		2
18	Synchronous Motion Generation of Multiple Continuum Robots Based on a Jacobian-Estimation Strategy. , 2021, , .		1

#	ARTICLE	IF	CITATIONS
19	A CNN-Based Position Control Method for Under-Actuated Cable-Driven Serpentine Manipulator. , 2021, , .		0
20	Towards Enhanced Social Well-being for the Disabled Using Humanoid Robot with Eye Tracker. , 2021, , .		0
21	Improved Gait Posture Prediction in Transfemoral Amputees with Reconstructed Shank EMG Signals. , 2021, , .		0
22	CCRobot-III: a Split-type Wire-driven Cable Climbing Robot for Cable-stayed Bridge Inspection. , 2020, , .		13
23	A Novel Solar Tracker Driven by Waves: From Idea to Implementation. , 2020, , .		2
24	Intention Understanding in Human-Robot Interaction Based on Visual-NLP Semantics. <i>Frontiers in Neurorobotics</i> , 2020, 14, 610139.	2.8	12
25	A Two-stage Automatic Latching System for The USVs Charging in Disturbed Berth. , 2020, , .		1
26	DiPE: Deeper into Photometric Errors for Unsupervised Learning of Depth and Ego-motion from Monocular Videos. , 2020, , .		13
27	OceanVoy: A Hybrid Energy Planning System for Autonomous Sailboat. , 2020, , .		9
28	Design and Optimization of a Wave Driven Solar Tracker for Floating Photovoltaic Plants. , 2019, , .		3
29	A System-of-Systems Bio-Inspired Design Process: Conceptual Design and Physical Prototype of a Reconfigurable Robot Capable of Multi-Modal Locomotion. <i>Frontiers in Neurorobotics</i> , 2019, 13, 78.	2.8	10
30	A New Turbine-Sail Coupled Propulsive System for Autonomous Sailboats*. , 2019, , .		1
31	An Adaptive Position Keeping Algorithm For Autonomous Sailboats. , 2019, , .		2
32	Obstacle Avoidance for Autonomous Sailboats via Reinforcement Learning with Coarse-to-fine Strategy. , 2019, , .		3
33	Wing Sail Land-yacht Modeling And System Verification. , 2019, , .		3
34	Real Time Obstacle Estimation Based on Dense Stereo Vision for Robotic Lawn Mowers. , 2019, , .		4
35	Collaborative Object Transportation by Multiple Robots with Onboard Object Localization Algorithm. , 2019, , .		3
36	Joint Torque Estimation toward Dynamic and Compliant Control for Gear-Driven Torque Sensorless Quadruped Robot. , 2019, , .		13

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37	Towards Long Duration Self-Sustainable Ocean Sampling System*. , 2019, , .		0
38	A Low-Cost, Wide-Range and Multi-Functional Vision Backend of Sailboat Research Testbed. , 2019, , .		2
39	Collision Avoidance for Autonomous Sailboats Based on RRS Protocol. , 2019, , .		3
40	Passive magnetic-based localization for precise untethered medical instrument tracking. Computer Methods and Programs in Biomedicine, 2018, 156, 151-161.	4.7	16
41	Passive Magnetic Localization in Medical Intervention. Series in Bioengineering, 2018, , 163-187.	0.6	3
42	Trajectory Tracking of Unicycle-type Robots with Constraints. , 2018, , .		1
43	Long-range Hand Gesture Recognition with Joint SSD Network. , 2018, , .		5
44	Design of An Adaptive Mini Gripper for Climbing Robots. , 2018, , .		1
45	Learning and Generation of Personal Handwriting Style Chinese Font. , 2018, , .		3
46	Trajectory Tracking for Leader-Follower Vehicle System with Velocity Constraints. , 2018, , .		0
47	Estimation of Foot Plantar Center of Pressure Trajectories with Low-Cost Instrumented Insoles Using an Individual-Specific Nonlinear Model. Sensors, 2018, 18, 421.	3.8	30
48	Hybrid actuator design for a gait augmentation wearable. , 2017, , .		1
49	High Accuracy Passive Magnetic Field-Based Localization for Feedback Control Using Principal Component Analysis. Sensors, 2016, 16, 1280.	3.8	3
50	Real-time sensor fault detection and compensation in a passive magnetic field-based localization system. , 2016, , .		1
51	Modular design of a real-time passive magnetic localization system for enhanced safety in nasogastric intubation. , 2016, , .		4
52	Design optimization of the sensor spatial arrangement in a direct magnetic field-based localization system for medical applications. , 2015, 2015, 897-900.		2
53	Using heterogeneous sensory measurements in a compliant magnetic localization system for medical intervention. , 2015, , .		5
54	A Non-invasive Real-time Localization System for Enhanced Efficacy in Nasogastric Intubation. Annals of Biomedical Engineering, 2015, 43, 2941-2952.	2.5	18

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55	Modeling and motion compensation of a bidirectional tendon-sheath actuated system for robotic endoscopic surgery. <i>Computer Methods and Programs in Biomedicine</i> , 2015, 119, 77-87.	4.7	28
56	A Hybrid Field Model for Enhanced Magnetic Localization and Position Control. <i>IEEE/ASME Transactions on Mechatronics</i> , 2015, 20, 1278-1287.	5.8	15
57	Design and analysis of a compliant non-invasive real-time localization system for nasogastric intubation. , 2014, , .		8
58	Elongation Modeling and Compensation for the Flexible Tendon-Sheath System. <i>IEEE/ASME Transactions on Mechatronics</i> , 2014, 19, 1243-1250.	5.8	59
59	Feasibility of full-thickness gastric resection using master and slave transluminal endoscopic robot and closure by overstitch: a preclinical study. <i>Surgical Endoscopy and Other Interventional Techniques</i> , 2014, 28, 319-324.	2.4	64
60	HAPTIC MODELING OF STOMACH FOR REAL-TIME PROPERTY AND FORCE ESTIMATION. <i>Journal of Mechanics in Medicine and Biology</i> , 2013, 13, 1350021.	0.7	2
61	Haptic feedback and control of a flexible surgical endoscopic robot. <i>Computer Methods and Programs in Biomedicine</i> , 2013, 112, 260-271.	4.7	42
62	Modeling tendon-sheath mechanism with flexible configurations for robot control. <i>Robotica</i> , 2013, 31, 1131-1142.	1.9	28
63	Endoscopic submucosal dissection of gastric lesions by using a master and slave transluminal endoscopic robot: an animal survival study. <i>Endoscopy</i> , 2012, 44, 690-694.	1.8	62
64	Robot-Assisted Endoscopic Submucosal Dissection Is Effective in Treating Patients With Early-Stage Gastric Neoplasia. <i>Clinical Gastroenterology and Hepatology</i> , 2012, 10, 1117-1121.	4.4	117
65	Force feedback without sensor: A preliminary study on haptic modeling. , 2012, , .		3
66	Towards haptics enabled surgical robotic system for NOTES. , 2011, , .		3
67	The future of transluminal surgery. <i>Expert Review of Medical Devices</i> , 2011, 8, 669-671.	2.8	9
68	Enhancement of a master-slave robotic system for natural orifice transluminal endoscopic surgery. <i>Annals of the Academy of Medicine, Singapore</i> , 2011, 40, 223-30.	0.4	14
69	Design of a master and slave transluminal endoscopic robot for natural orifice transluminal endoscopic surgery. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2010, 224, 1495-1503.	2.1	42
70	Enhancement of spatial orientation and haptic perception for master-slave robotic Natural Orifice Transluminal Endoscopic Surgery (NOTES). , 2010, , .		5
71	Natural orifice transgastric endoscopic wedge hepatic resection in an experimental model using an intuitively controlled master and slave transluminal endoscopic robot (MASTER). <i>Surgical Endoscopy and Other Interventional Techniques</i> , 2010, 24, 2293-2298.	2.4	61
72	Development and preliminary data of novel integrated optical micro-force sensing tools for retinal microsurgery. , 2009, , .		8

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73	Master and slave transluminal endoscopic robot (MASTER) for natural Orifice Transluminal Endoscopic Surgery (NOTES). , 2009, 2009, 1192-5.		89
74	A sub-millimetric, 0.25 mN resolution fully integrated fiber-optic force-sensing tool for retinal microsurgery. International Journal of Computer Assisted Radiology and Surgery, 2009, 4, 383-390.	2.8	158
75	Robotic system for noâ€scar gastrointestinal surgery. International Journal of Medical Robotics and Computer Assisted Surgery, 2008, 4, 15-22.	2.3	84
76	Master and Slave Robotic System For Natural Orifice Transluminal Endoscopic Surgery. , 2008, , .		3