

Shuxiang Guo

List of Publications by Year in descending order

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504
papers

6,730
citations

71061

41
h-index

133188

59
g-index

505
all docs

505
docs citations

505
times ranked

2065
citing authors

#	ARTICLE	IF	CITATIONS
1	A new type of fish-like underwater microrobot. IEEE/ASME Transactions on Mechatronics, 2003, 8, 136-141.	3.7	327
2	Safety Operation Consciousness Realization of a MR Fluids-Based Novel Haptic Interface for Teleoperated Catheter Minimally Invasive Neurosurgery. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1043-1054.	3.7	114
3	A Novel Robot-Assisted Endovascular Catheterization System With Haptic Force Feedback. IEEE Transactions on Robotics, 2019, 35, 685-696.	7.3	104
4	Development of a Spherical Underwater Robot Equipped with Multiple Vectored Water-Jet-Based Thrusters. Journal of Intelligent and Robotic Systems: Theory and Applications, 2012, 67, 307-321.	2.0	99
5	Design and experimental evaluation of a teleoperated haptic robot-assisted catheter operating system. Journal of Intelligent Material Systems and Structures, 2016, 27, 3-16.	1.4	93
6	A cooperation of catheters and guidewires-based novel remote-controlled vascular interventional robot. Biomedical Microdevices, 2018, 20, 20.	1.4	86
7	Modeling and experimental evaluation of an improved amphibious robot with compact structure. Robotics and Computer-Integrated Manufacturing, 2018, 51, 37-52.	6.1	84
8	Design and performance evaluation of an amphibious spherical robot. Robotics and Autonomous Systems, 2015, 64, 21-34.	3.0	78
9	A Kinect-Based Real-Time Compressive Tracking Prototype System for Amphibious Spherical Robots. Sensors, 2015, 15, 8232-8252.	2.1	76
10	Operation evaluation in-human of a novel remote-controlled vascular interventional robot. Biomedical Microdevices, 2018, 20, 34.	1.4	74
11	Design and performance evaluation of collision protection-based safety operation for a haptic robot-assisted catheter operating system. Biomedical Microdevices, 2018, 20, 22.	1.4	69
12	Development of an Amphibious Turtle-Inspired Spherical Mother Robot. Journal of Bionic Engineering, 2013, 10, 446-455.	2.7	68
13	Compensatory force measurement and multimodal force feedback for remote-controlled vascular interventional robot. Biomedical Microdevices, 2018, 20, 74.	1.4	68
14	Operating force information on-line acquisition of a novel slave manipulator for vascular interventional surgery. Biomedical Microdevices, 2018, 20, 33.	1.4	64
15	Hybrid Locomotion Evaluation for a Novel Amphibious Spherical Robot. Applied Sciences (Switzerland), 2018, 8, 156.	1.3	63
16	Design and characteristics evaluation of a novel teleoperated robotic catheterization system with force feedback for vascular interventional surgery. Biomedical Microdevices, 2016, 18, 76.	1.4	62
17	Comparison of sEMG-Based Feature Extraction and Motion Classification Methods for Upper-Limb Movement. Sensors, 2015, 15, 9022-9038.	2.1	61
18	Design and characteristics evaluation of a novel spherical underwater robot. Robotics and Autonomous Systems, 2017, 94, 61-74.	3.0	61

#	ARTICLE	IF	CITATIONS
19	Performance evaluation of a strain-gauge force sensor for a haptic robot-assisted catheter operating system. <i>Microsystem Technologies</i> , 2017, 23, 5041-5050.	1.2	61
20	Hydrodynamic Analysis-Based Modeling and Experimental Verification of a New Water-Jet Thruster for an Amphibious Spherical Robot. <i>Sensors</i> , 2019, 19, 259.	2.1	61
21	A CNN-based prototype method of unstructured surgical state perception and navigation for an endovascular surgery robot. <i>Medical and Biological Engineering and Computing</i> , 2019, 57, 1875-1887.	1.6	60
22	Performance evaluation of a robot-assisted catheter operating system with haptic feedback. <i>Biomedical Microdevices</i> , 2018, 20, 50.	1.4	56
23	Study on real-time force feedback for a master-slave interventional surgical robotic system. <i>Biomedical Microdevices</i> , 2018, 20, 37.	1.4	55
24	A biomimetic underwater microrobot with multifunctional locomotion. <i>Robotics and Autonomous Systems</i> , 2012, 60, 1472-1483.	3.0	53
25	Design of a Novel Telerehabilitation System with a Force-Sensing Mechanism. <i>Sensors</i> , 2015, 15, 11511-11527.	2.1	53
26	A vascular interventional surgical robot based on surgeon's operating skills. <i>Medical and Biological Engineering and Computing</i> , 2019, 57, 1999-2010.	1.6	53
27	A highly stable and efficient spherical underwater robot with hybrid propulsion devices. <i>Autonomous Robots</i> , 2020, 44, 759-771.	3.2	52
28	A novel hybrid microrobot using rotational magnetic field for medical applications. <i>Biomedical Microdevices</i> , 2015, 17, 31.	1.4	50
29	Development of a Tactile Sensing Robot-Assisted System for Vascular Interventional Surgery. <i>IEEE Sensors Journal</i> , 2021, 21, 12284-12294.	2.4	50
30	Development of a powered variable-stiffness exoskeleton device for elbow rehabilitation. <i>Biomedical Microdevices</i> , 2018, 20, 64.	1.4	49
31	A Vascular Interventional Surgical Robotic System Based on Force-Visual Feedback. <i>IEEE Sensors Journal</i> , 2019, 19, 11081-11089.	2.4	49
32	Vascular elasticity determined mass-spring model for virtual reality simulators. <i>International Journal of Mechatronics and Automation</i> , 2015, 5, 1.	0.1	48
33	A virtual reality simulator and force sensation combined catheter operation training system and its preliminary evaluation. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2017, 13, e1769.	1.2	48
34	Design and performance evaluation of a haptic interface based on MR fluids for endovascular tele-surgery. <i>Microsystem Technologies</i> , 2018, 24, 909-918.	1.2	48
35	Muscle Strength Assessment System Using sEMG-Based Force Prediction Method for Wrist Joint. <i>Journal of Medical and Biological Engineering</i> , 2016, 36, 121-131.	1.0	46
36	Study of the Operational Safety of a Vascular Interventional Surgical Robotic System. <i>Micromachines</i> , 2018, 9, 119.	1.4	46

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37	Design and performance evaluation of a novel robotic catheter system for vascular interventional surgery. <i>Microsystem Technologies</i> , 2016, 22, 2167-2176.	1.2	45
38	Performance Evaluation of a Novel Propulsion System for the Spherical Underwater Robot (SURIII). <i>Applied Sciences (Switzerland)</i> , 2017, 7, 1196.	1.3	45
39	A Novel Step Optimal Path Planning Algorithm for the Spherical Mobile Robot Based on Fuzzy Control. <i>IEEE Access</i> , 2020, 8, 1394-1405.	2.6	44
40	A roller-skating/walking mode-based amphibious robot. <i>Robotics and Computer-Integrated Manufacturing</i> , 2017, 44, 17-29.	6.1	43
41	Robust RGB-D Camera and IMU Fusion-based Cooperative and Relative Close-range Localization for Multiple Turtle-inspired Amphibious Spherical Robots. <i>Journal of Bionic Engineering</i> , 2019, 16, 442-454.	2.7	43
42	Development and Evaluation of Novel Magnetic Actuated Microrobot with Spiral Motion Using Electromagnetic Actuation System. <i>Journal of Medical and Biological Engineering</i> , 2016, 36, 506-514.	1.0	41
43	Visual Detection and Tracking System for a Spherical Amphibious Robot. <i>Sensors</i> , 2017, 17, 870.	2.1	41
44	Machine learning-based operation skills assessment with vascular difficulty index for vascular intervention surgery. <i>Medical and Biological Engineering and Computing</i> , 2020, 58, 1707-1721.	1.6	40
45	Characteristic Evaluation of a Shrouded Propeller Mechanism for a Magnetic Actuated Microrobot. <i>Micromachines</i> , 2015, 6, 1272-1288.	1.4	39
46	Preliminary concept of a novel spherical underwater robot. <i>International Journal of Mechatronics and Automation</i> , 2015, 5, 11.	0.1	39
47	Design and evaluation of sensorized robot for minimally vascular interventional surgery. <i>Microsystem Technologies</i> , 2019, 25, 2759-2766.	1.2	39
48	Magnetorheological Fluids Actuated Haptic-Based Teleoperated Catheter Operating System. <i>Micromachines</i> , 2018, 9, 465.	1.4	38
49	Design, modeling and control of a miniature bio-inspired amphibious spherical robot. <i>Mechatronics</i> , 2021, 77, 102574.	2.0	38
50	A novel noncontact detection method of surgeon's operation for a master-slave endovascular surgery robot. <i>Medical and Biological Engineering and Computing</i> , 2020, 58, 871-885.	1.6	37
51	Development of a kind of robotic catheter manipulation system. , 2011, , .		36
52	Electromyography-Based Quantitative Representation Method for Upper-Limb Elbow Joint Angle in Sagittal Plane. <i>Journal of Medical and Biological Engineering</i> , 2015, 35, 165-177.	1.0	36
53	Mechatronic System and Experiments of a Spherical Underwater Robot: SUR-II. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2015, 80, 325-340.	2.0	35
54	Modal and fatigue analysis of critical components of an amphibious spherical robot. <i>Microsystem Technologies</i> , 2017, 23, 2233-2247.	1.2	35

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55	Design and evaluation of safety operation VR training system for robotic catheter surgery. Medical and Biological Engineering and Computing, 2018, 56, 25-35.	1.6	34
56	Development of a Lobster-Inspired Underwater Microrobot. International Journal of Advanced Robotic Systems, 2013, 10, 44.	1.3	33
57	Preliminary mechanical analysis of an improved amphibious spherical father robot. Microsystem Technologies, 2016, 22, 2051-2066.	1.2	33
58	Underwater motion characteristics evaluation of multi amphibious spherical robots. Microsystem Technologies, 2019, 25, 499-508.	1.2	33
59	A Fuzzy PID Algorithm for a Novel Miniature Spherical Robots with Three-dimensional Underwater Motion Control. Journal of Bionic Engineering, 2020, 17, 959-969.	2.7	33
60	Mechanism and Control of a Novel Type Microrobot for Biomedical Application. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	32
61	Development of an amphibious mother spherical robot used as the carrier for underwater microrobots. , 2012, , .		32
62	ANSYS FLUENT-based modeling and hydrodynamic analysis for a spherical underwater robot. , 2013, , .		32
63	Multilevel Operation Strategy of a Vascular Interventional Robot System for Surgical Safety in Teleoperation. IEEE Transactions on Robotics, 2022, 38, 2238-2250.	7.3	32
64	Performance Evaluation of a Magnetically Actuated Capsule Microrobotic System for Medical Applications. Micromachines, 2018, 9, 641.	1.4	31
65	A Multi-Sensor Fusion Self-Localization System of a Miniature Underwater Robot in Structured and GPS-Denied Environments. IEEE Sensors Journal, 2021, 21, 27136-27146.	2.4	31
66	Uncertain moving obstacles avoiding method in 3D arbitrary path planning for a spherical underwater robot. Robotics and Autonomous Systems, 2022, 151, 104011.	3.0	31
67	Design and kinematic analysis of an amphibious spherical robot. , 2012, , .		30
68	A virtual reality-based method of decreasing transmission time of visual feedback for a teleoperative robotic catheter operating system. International Journal of Medical Robotics and Computer Assisted Surgery, 2016, 12, 32-45.	1.2	30
69	Development of Multiple Capsule Robots in Pipe. Micromachines, 2018, 9, 259.	1.4	30
70	A system on chip-based real-time tracking system for amphibious spherical robots. International Journal of Advanced Robotic Systems, 2017, 14, 172988141771655.	1.3	29
71	A Novel Small-scale Turtle-inspired Amphibious Spherical Robot. , 2019, , .		29
72	An intention-based online bilateral training system for upper limb motor rehabilitation. Microsystem Technologies, 2021, 27, 211-222.	1.2	28

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73	Total Force Analysis and Safety Enhancing for Operating Both Guidewire and Catheter in Endovascular Surgery. IEEE Sensors Journal, 2021, 21, 22499-22509.	2.4	28
74	A tensor-mass method-based vascular model and its performance evaluation for interventional surgery virtual reality simulator. International Journal of Medical Robotics and Computer Assisted Surgery, 2018, 14, e1946.	1.2	27
75	Improved Model Predictive-Based Underwater Trajectory Tracking Control for the Biomimetic Spherical Robot under Constraints. Applied Sciences (Switzerland), 2020, 10, 8106.	1.3	27
76	Collaboration and Task Planning of Turtle-Inspired Multiple Amphibious Spherical Robots. Micromachines, 2020, 11, 71.	1.4	27
77	Design and Evaluation of a Haptic Robot-Assisted Catheter Operating System With Collision Protection Function. IEEE Sensors Journal, 2021, 21, 20807-20816.	2.4	27
78	A novel multifunctional underwater microrobot. , 2010, , .		26
79	Realization of a Catheter Driving Mechanism with Micro tactile sensor for Intravascular Neurosurgery. , 2006, , .		25
80	Evaluating performance of a novel developed robotic catheter manipulating system. Journal of Micro-Bio Robotics, 2013, 8, 133-143.	2.1	25
81	Design and performance evaluation of a biomimetic microrobot for the fatherâ€™son underwater intervention robotic system. Microsystem Technologies, 2016, 22, 831-840.	1.2	25
82	Online measuring and evaluation of guidewire inserting resistance for robotic interventional surgery systems. Microsystem Technologies, 2018, 24, 3467-3477.	1.2	25
83	Coordinative Motion-based Bilateral Rehabilitation Training System with Exoskeleton and Haptic Devices for Biomedical Application. Micromachines, 2019, 10, 8.	1.4	25
84	A Home-Based Bilateral Rehabilitation System With sEMG-based Real-Time Variable Stiffness. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 1529-1541.	3.9	25
85	Development of a Novel Robotic Catheter Manipulating System with Fuzzy PID Control. International Journal of Intelligent Mechatronics and Robotics, 2012, 2, 58-77.	0.4	24
86	The communication and stability evaluation of amphibious spherical robots. Microsystem Technologies, 2019, 25, 2625-2636.	1.2	24
87	Task Planning and Collaboration of Jellyfish-inspired Multiple Spherical Underwater Robots. Journal of Bionic Engineering, 2022, 19, 643-656.	2.7	24
88	Analysis and improvement of the water-jet propulsion system of a spherical underwater robot. , 2012, , .		23
89	3D Modelling of a Vectored Water Jet-Based Multi-Propeller Propulsion System for a Spherical Underwater Robot. International Journal of Advanced Robotic Systems, 2013, 10, 80.	1.3	23
90	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

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91	Design and characteristic evaluation of a novel amphibious spherical robot. <i>Microsystem Technologies</i> , 2017, 23, 1999-2012.	1.2	23
92	A Surgeon's Operating Skills-Based Non-Interference Operation Detection Method for Novel Vascular Interventional Surgery Robot Systems. <i>IEEE Sensors Journal</i> , 2020, 20, 3879-3891.	2.4	23
93	Design and evaluation of a novel guidewire navigation robot. , 2016, , .		22
94	Design, modeling and experimental evaluation of a legged, multi-vectored water-jet composite driving mechanism for an amphibious spherical robot. <i>Microsystem Technologies</i> , 2020, 26, 475-487.	1.2	22
95	Path Optimization Method for the Spherical Underwater Robot in Unknown Environment. <i>Journal of Bionic Engineering</i> , 2020, 17, 944-958.	2.7	22
96	Developments of two novel types of underwater crawling microrobots. , 0, , .		21
97	A novel force feedback interventional surgery robotic system. , 2015, , .		21
98	Active Suppression Method of Dangerous Behaviors for Robot-Assisted Vascular Interventional Surgery. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-9.	2.4	21
99	A New Type of Jellyfish-Like Microrobot. , 2007, , .		20
100	IPMC actuator-based an underwater microrobot with 8 legs. , 2008, , .		20
101	Preliminary concept and kinematics simulation of a novel Spherical Underwater Robot. , 2014, , .		20
102	ADRC-Based Control Method for the Vascular Intervention Master-Slave Surgical Robotic System. <i>Micromachines</i> , 2021, 12, 1439.	1.4	20
103	An Endovascular Catheterization Robotic System Using Collaborative Operation with Magnetically Controlled Haptic Force Feedback. <i>Micromachines</i> , 2022, 13, 505.	1.4	20
104	Fuzzy PID algorithm-based motion control for the spherical amphibious robot. , 2015, , .		19
105	Development of a biomimetic underwater microrobot for a father-son robot system. <i>Microsystem Technologies</i> , 2017, 23, 849-861.	1.2	18
106	Surgeons' Operation Skill-Based Control Strategy and Preliminary Evaluation for a Vascular Interventional Surgical Robot. <i>Journal of Medical and Biological Engineering</i> , 2019, 39, 653-664.	1.0	18
107	Design and implementation of a novel wireless modular capsule robotic system in pipe. <i>Medical and Biological Engineering and Computing</i> , 2020, 58, 2305-2324.	1.6	18
108	Study on the Autonomous Multirobot Collaborative Control System Based on Spherical Amphibious Robots. <i>IEEE Systems Journal</i> , 2021, 15, 4950-4957.	2.9	18

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109	A magnetorheological fluid-based tremor reduction method for robot-assisted catheter operating system. <i>International Journal of Mechatronics and Automation</i> , 2021, 8, 72.	0.1	18
110	Design and performance evaluation of a master controller for endovascular catheterization. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2016, 11, 119-131.	1.7	17
111	A marker-based contactless catheter-sensing method to detect surgeons's operations for catheterization training systems. <i>Biomedical Microdevices</i> , 2018, 20, 76.	1.4	17
112	A wireless microrobot with two motions for medical applications. , 2012, , .		16
113	Adaptive fuzzy sliding mode control for spherical underwater robots. , 2012, , .		16
114	A Novel tele-operation controller for wireless microrobots in-pipe with hybrid motion. <i>Robotics and Autonomous Systems</i> , 2016, 76, 68-79.	3.0	16
115	Characteristic evaluation of a magnetic-actuated microrobot in pipe with screw jet motion. <i>Microsystem Technologies</i> , 2019, 25, 719-727.	1.2	16
116	Selective Motion Control of a Novel Magnetic-Driven Minirobot With Targeted Drug Sustained-Release Function. <i>IEEE/ASME Transactions on Mechatronics</i> , 2022, 27, 336-347.	3.7	16
117	Characteristic Analysis of a Magnetically Actuated Capsule Microrobot in Medical Applications. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-11.	2.4	16
118	A Surgeon's Habits-Based Novel Master Manipulator for the Vascular Interventional Surgical Master-Slave Robotic System. <i>IEEE Sensors Journal</i> , 2022, 22, 9922-9931.	2.4	16
119	A novel butterfly-inspired underwater microrobot with pectoral fins. , 2011, , .		15
120	A smart actuator-based underwater microrobot with two motion attitudes. , 2012, , .		15
121	Characteristic evaluation of a wireless capsule microrobotic system. , 2013, , .		15
122	Performance evaluation of the novel grasper for a robotic catheter navigation system. , 2014, , .		15
123	Design and characteristics evaluation of a novel VR-based robot-assisted catheterization training system with force feedback for vascular interventional surgery. <i>Microsystem Technologies</i> , 2017, 23, 3107-3116.	1.2	15
124	A Multi-Functional Module-Based Capsule Robot. <i>IEEE Sensors Journal</i> , 2021, 21, 12057-12067.	2.4	15
125	Cloud Communication-Based Sensing Performance Evaluation of a Vascular Interventional Robot System. <i>IEEE Sensors Journal</i> , 2022, 22, 9005-9017.	2.4	15
126	Fish-like underwater microrobot with multi DOF. , 0, , .		14

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127	Design and Control of a Novel Type of Microrobot Moving in Pipe. , 2006, , .		14
128	Development of an Infrared Ray controlled fish-like underwater microrobot. , 2010, , .		14
129	Control of the wireless microrobot with multi-DOFs locomotion for medical applications. , 2012, , .		14
130	A neural network-based self-tuning PID controller of an autonomous underwater vehicle. , 2012, , .		14
131	A Magnetorheological Fluids-Based Robot-Assisted Catheter/Guidewire Surgery System for Endovascular Catheterization. Micromachines, 2021, 12, 640.	1.4	14
132	A Mirror Bilateral Neuro-Rehabilitation Robot System with the sEMG-Based Real-Time Patient Active Participant Assessment. Life, 2021, 11, 1290.	1.1	14
133	Machine Learning-Based Surgical State Perception and Collaborative Control for a Vascular Interventional Robot. IEEE Sensors Journal, 2022, 22, 7106-7118.	2.4	14
134	Multiple Bio-Inspired Father-Son Underwater Robot for Underwater Target Object Acquisition and Identification. Micromachines, 2022, 13, 25.	1.4	14
135	Development of a new type of capsule micropump. , 0, , .		13
136	A novel motor function training assisted system for upper limbs rehabilitation. , 2009, , .		13
137	Bio-inspired robot launching system for a mother-son underwater manipulation task. , 2014, , .		13
138	Feedback force evaluation for a novel robotic catheter navigation system. , 2014, , .		13
139	A Telepresence System for Therapist-in-the-Loop Training for Elbow Joint Rehabilitation. Applied Sciences (Switzerland), 2019, 9, 1710.	1.3	13
140	Study on Decentralization of Spherical Amphibious Multi-robot Control System Based on Smart Contract and Blockchain. Journal of Bionic Engineering, 2021, 18, 1317-1330.	2.7	13
141	Development of the novel types of biomimetic microrobots driven by external magnetic field. , 2007, , .		12
142	VR-based a novel active rehabilitation system for upper limbs. , 2008, , .		12
143	Electrical system design of a spherical underwater robot (SUR-II). , 2013, , .		12
144	Characteristic analysis on land for an amphibious spherical robot. , 2014, , .		12

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145	Study on haptic feedback functions for an interventional surgical robot system. , 2015, , .		12
146	Design and kinematic simulation of a novel exoskeleton rehabilitation hand robot. , 2016, , .		12
147	Transverse microvibrations-based guide wires drag reduction evaluation for endovascular interventional application. Biomedical Microdevices, 2018, 20, 69.	1.4	12
148	Design of Intelligent Human-Computer Interaction System for Hard of Hearing and Non-Disabled People. IEEE Sensors Journal, 2021, 21, 23471-23479.	2.4	12
149	Performance Evaluation of a Magnetically Driven Microrobot for Targeted Drug Delivery. Micromachines, 2021, 12, 1210.	1.4	12
150	Magnetically Controlled Multifunctional Capsule Robot for Dual-Drug Delivery. IEEE Systems Journal, 2022, 16, 6413-6424.	2.9	12
151	A Virtual Linkage-Based Dual Event-Triggered Formation Control Strategy for Multiple Amphibious Spherical Robots in Constrained Space With Limited Communication. IEEE Sensors Journal, 2022, 22, 13395-13406.	2.4	12
152	Development of an underwater biomimetic microrobot with compact structure and flexible locomotion. Microsystem Technologies, 2007, 13, 883-890.	1.2	11
153	Experimental Identification and Active Control of Configuration Dependent Linkage Vibration in a Planar Parallel Robot. IEEE Transactions on Control Systems Technology, 2009, 17, 960-969.	3.2	11
154	Development of an Infrared Sensor-based Wireless Intelligent Fish-like Underwater Microrobot. , 2010, , .		11
155	A novel PDMS diaphragm micropump based on ICPF actuator. , 2010, , .		11
156	Characteristics evaluation of the vertical motion of a spherical underwater robot. , 2012, , .		11
157	Development of a Venus flytrap-inspired robotic flytrap. , 2012, , .		11
158	Performance evaluation on land of an amphibious spherical mother robot in different terrains. , 2013, , .		11
159	A low-power SoC-based moving target detection system for amphibious spherical robots. , 2015, , .		11
160	High precise haptic device for the robotic catheter navigation system. , 2016, , .		11
161	Conceptual design of a novel magnetically actuated hybrid microrobot. , 2017, , .		11
162	Binocular vision-based underwater ranging methods. , 2017, , .		11

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163	Design of the Speech Control System for a Upper Limb Rehabilitation Robot Based on Wavelet De-noising. , 2018, , .		11
164	Platform Design for a Natatores-like Amphibious Robot. , 2018, , .		11
165	A Compensation Method for Magnetic Localization on Capsule Robot in Medical Application. IEEE Sensors Journal, 2021, 21, 26690-26698.	2.4	11
166	sEMG-Based Motion Recognition of Upper Limb Rehabilitation Using the Improved Yolo-v4 Algorithm. Life, 2022, 12, 64.	1.1	11
167	A novel type of underwater crawling microrobot. , 2005, , .		10
168	Feasibility study for a novel robotic catheter system. , 2011, , .		10
169	Development of a novel robot-assisted catheter system with force feedback. , 2011, , .		10
170	Recognition of motion of human upper limb using sEMG in real time: Towards bilateral rehabilitation. , 2012, , .		10
171	Modeling and experiments of IPMC actuators for the position precision of underwater legged microrobots. , 2012, , .		10
172	Underwater performance evaluation of an amphibious spherical mother robot. , 2013, , .		10
173	A novel type of catheter sidewall tactile sensor array for vascular interventional surgery. , 2013, , .		10
174	Skating motion analysis of the amphibious quadruped mother robot. , 2013, , .		10
175	A control system of the wireless microrobots in pipe. , 2014, , .		10
176	Force model-based haptic master console design for teleoperated minimally invasive surgery application. , 2015, , .		10
177	Communication between Spherical Underwater Robots based on the acoustic communication methods. , 2016, , .		10
178	Design and performance evaluation of a novel master manipulator for the robot-assist catheter system. , 2016, , .		10
179	Toward cooperation of catheter and guidewire for remote-controlled vascular interventional robot. , 2017, , .		10
180	Vascular Environment Modeling and Verification for the Virtual Vessel Interventional Surgery Training System. , 2018, , .		10

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181	A Novel Vascular Interventional Surgeon Training System with Cooperation between Catheter and Guidewire. , 2019, , .		10
182	Development of an artificial fish microrobot. , 0, , .		9
183	Design and Experimental Results of A Tripodic Biomimetic Microrobot with 5 DOFs. , 2006, , .		9
184	A force display method for a novel catheter operating system. , 2010, , .		9
185	A novel jellyfish-like biomimetic microrobot. , 2010, , .		9
186	Dynamic mechanics and electric field analysis of an ICPF actuated fish-like underwater microrobot. , 2011, , .		9
187	Design of a wireless hybrid in-pipe microrobot with 3 DOFs. , 2011, , .		9
188	Internet based remote control for a robotic catheter manipulating system. , 2012, , .		9
189	A surface EMG signals-based real-time continuous recognition for the upper limb multi-motion. , 2012, , .		9
190	Passive and active attitude stabilization method for the spherical underwater robot (SUR-II). , 2013, , .		9
191	Development of Wireless Endoscope with Symmetrical Motion Characteristics. International Journal of Advanced Robotic Systems, 2014, 11, 148.	1.3	9
192	Push force feedback for a kind of robotic catheter navigation system. , 2015, , .		9
193	Virtual prototyping technology-based dynamics analysis for an amphibious spherical robot. , 2015, , .		9
194	Force feedback-based robotic catheter training system for the vascular interventional surgery. , 2016, , .		9
195	Design and principle analysis for electromagnetic brake clamping mechanism of a novel slave manipulator. , 2016, , .		9
196	A LabVIEW-based human-computer interaction system for the exoskeleton hand rehabilitation robot. , 2017, , .		9
197	Characteristic Evaluation of a Master-Slave Interventional Surgical Robot Control System. , 2018, , .		9
198	Design of A Novel Drug-delivery Module for Active Locomotive Intestinal Capsule Endoscopy. , 2018, , .		9

#	ARTICLE	IF	CITATIONS
199	A Method of Evaluating Rehabilitation Stage by sEMG Signals for the Upper Limb Rehabilitation Robot. , 2019, , .		9
200	Performance Evaluation of a Hybrid Thruster for Spherical Underwater Robots. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-10.	2.4	9
201	A method of decreasing time delay for a tele-surgery system. , 2012, , .		8
202	Development of force sensing systems for a novel robotic catheter system. , 2012, , .		8
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205	Performance evaluation of a magnetic microrobot driven by rotational magnetic field. , 2015, , .		8
206	Design and evaluation of quadruped gaits for amphibious spherical robots. , 2016, , .		8
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208	A hybrid propulsion device for the spherical underwater robot (SUR III). , 2017, , .		8
209	A novel design of grasper for the interventional surgical robot. , 2017, , .		8
210	Kalman Filter-based navigation system for the Amphibious Spherical Robot. , 2017, , .		8
211	Tensor-mass Model based real-time simulation of vessel deformation and force feedback for the interventional surgery training system. , 2017, , .		8
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214	Design and Evaluation of a Novel Slave Manipulator for the Vascular Interventional Robotic System. , 2019, , .		8
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227	Performance evaluation on land of an amphibious spherical mother robot. , 2013, , .		7
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229	A proximal push force-based force feedback algorithm for robot-assisted vascular intervention surgery. , 2015, , .		7
230	Characteristics evaluation of a biomimetic microrobot for a Father-son Underwater Intervention Robotic system. , 2015, , .		7
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233	Development of a novel wireless spiral capsule robot with modular structure. , 2017, , .		7
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261	Motion Performance evaluation of a Magnetic Actuated Screw Jet Microrobot. , 2017, , .		6
262	A Novel Bilateral Control Strategy for Master-slave Vascular Interventional Robots. , 2018, , .		6
263	Study on physiological tremor recognition algorithm in the vascular interventional surgical robot. , 2018, , .		6
264	Hydrodynamic Analysis of a Novel Thruster for Amphibious Sphere Robots. , 2018, , .		6
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339	Cable-driven interventional operation robot with Stribeck friction feedforward compensation. , 2017, , .		3
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341	A Novel Suppression Algorithm of Isometric Tremor for the Vascular Interventional Surgical Robot*. , 2018, , .		3
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350	Study on Tracking Stability for a Master-Slave Vascular Interventional Robotic System. , 2019, , .		3
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366	Triangle formation motion planning of underwater Multi-microrobot system. , 2008, , .		2
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