Jun-Zhi Yu

List of Publications by Year
in descending order

324	6,901	53794 45	95266 68
papers	citations	h-index	g-index

330	330	330	4008
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Development of a Biomimetic Robotic Fish and Its Control Algorithm. IEEE Transactions on Systems, Man, and Cybernetics, 2004, 34, 1798-1810.	5.0	368
2	A Survey on CPG-Inspired Control Models and System Implementation. IEEE Transactions on Neural Networks and Learning Systems, 2014, 25, 441-456.	11.3	221
3	Global stability analysis of fractional-order Hopfield neural networks with time delay. Neurocomputing, 2015, 154, 15-23.	5.9	214
4	Dynamic analysis of a fractional-order Lorenz chaotic systemâ˜†. Chaos, Solitons and Fractals, 2009, 42, 1181-1189.	5.1	156
5	Trajectory tracking control of a bionic robotic fish based on iterative learning. Science China Information Sciences, 2020, 63, 1.	4.3	153
6	LMI Conditions for Global Stability of Fractional-Order Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 2423-2433.	11.3	152
7	On a Bio-inspired Amphibious Robot Capable of Multimodal Motion. IEEE/ASME Transactions on Mechatronics, 2012, 17, 847-856.	5.8	130
8	A soft manipulator for efficient delicate grasping in shallow water: Modeling, control, and real-world experiments. International Journal of Robotics Research, 2021, 40, 449-469.	8.5	118
9	Second-Order Continuous-Time Algorithms for Economic Power Dispatch in Smart Grids. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2018, 48, 1482-1492.	9.3	115
10	An Adaptive Takagiâ€“Sugeno Fuzzy Model-Based Predictive Controller for Piezoelectric Actuators. IEEE Transactions on Industrial Electronics, 2017, 64, 3048-3058.	7.9	100
11	Coordination of Multiple Robotic Fish With Applications to Underwater Robot Competition. IEEE Transactions on Industrial Electronics, 2016, 63, 1280-1288.	7.9	92
12	An Inertial Projection Neural Network for Solving Variational Inequalities. IEEE Transactions on Cybernetics, 2017, 47, 809-814.	9.5	90
13	Optimal Formation of Multirobot Systems Based on a Recurrent Neural Network. IEEE Transactions on Neural Networks and Learning Systems, 2016, 27, 322-333.	11.3	88
14	Path Planning of Industrial Robot Based on Improved RRT Algorithm in Complex Environments. IEEE Access, 2018, 6, 53296-53306.	4.2	87
15	Towards Real-Time Advancement of Underwater Visual Quality With GAN. IEEE Transactions on Industrial Electronics, 2019, 66, 9350-9359.	7.9	85
16	Motion Control and Motion Coordination of Bionic Robotic Fish: A Review. Journal of Bionic Engineering, 2018, 15, 579-598.	5.0	84
17	CPG Network Optimization for a Biomimetic Robotic Fish via PSO. IEEE Transactions on Neural Networks and Learning Systems, 2016, 27, 1962-1968.	11.3	80
18	Implementing Flexible and Fast Turning Maneuvers of a Multijoint Robotic Fish. IEEE/ASME Transactions on Mechatronics, 2014, 19, 329-338.	5.8	79

#	Article	IF	Citations
19	Control of Yaw and Pitch Maneuvers of a Multilink Dolphin Robot. IEEE Transactions on Robotics, 2012, 28, 318-329.	10.3	75
20	Development of a Fast-Swimming Dolphin Robot Capable of Leaping. IEEE/ASME Transactions on Mechatronics, 2016, 21, 2307-2316.	5.8	71
21	Depth Control of a Bioinspired Robotic Dolphin Based on Sliding-Mode Fuzzy Control Method. IEEE Transactions on Industrial Electronics, 2018, 65, 2429-2438.	7.9	71
22	Development of an Underwater Manipulator and Its Free-Floating Autonomous Operation. IEEE/ASME Transactions on Mechatronics, 2016, 21, 815-824.	5.8	70
23	Adaptive task assignment for multiple mobile robots via swarm intelligence approach. Robotics and Autonomous Systems, 2007, 55, 572-588.	5.1	64
24	Development of a Novel Robotic Dolphin and Its Application to Water Quality Monitoring. IEEE/ASME Transactions on Mechatronics, 2017, 22, 2130-2140.	5.8	62
25	Geometric Optimization of Relative Link Lengths for Biomimetic Robotic Fish. , 2007, 23, 382-386.		61
26	A simplified propulsive model of bio-mimetic robot fish and its realization. Robotica, 2005, 23, 101-107.	1.9	60
27	Three-Dimensional Swimming. IEEE Robotics and Automation Magazine, 2011, 18, 47-58.	2.0	58
28	Embedded Vision-Guided 3-D Tracking Control for Robotic Fish. IEEE Transactions on Industrial Electronics, 2016, 63, 355-363.	7.9	58
29	Data-Driven Dynamic Modeling for a Swimming Robotic Fish. IEEE Transactions on Industrial Electronics, 2016, 63, 5632-5640.	7.9	57
30	Turning Control of a Multilink Biomimetic Robotic Fish. , 2008, 24, 201-206.		56
31	A Paradigm for Path Following Control of a Ribbon-Fin Propelled Biomimetic Underwater Vehicle. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 482-493.	9.3	56
32	Development of an artificial fish-like robot and its application in cooperative transportation. Control Engineering Practice, 2008, 16, 569-584.	5.5	55
33	An Inversion-free Predictive Controller for Piezoelectric Actuators Based on A Dynamic Linearized Neural Network Model. IEEE/ASME Transactions on Mechatronics, 2015, , 1-1.	5.8	53
34	Design and Control of a Single-Motor-Actuated Robotic Fish Capable of Fast Swimming and Maneuverability. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1711-1719.	5.8	53
35	Sliding Mode Observer-Based Heading Control for a Gliding Robotic Dolphin. IEEE Transactions on Industrial Electronics, 2017, 64, 6815-6824.	7.9	52
36	A Bio-Inspired Robot With Undulatory Fins and Its Control Methods. IEEE/ASME Transactions on Mechatronics, 2017, 22, 206-216.	5.8	52

#	Article	IF	Citations
37	Towards a Gliding Robotic Dolphin: Design, Modeling, and Experiments. IEEE/ASME Transactions on Mechatronics, 2019, 24, 260-270.	5.8	52
38	Three-Dimensional Modeling of a Fin-Actuated Robotic Fish With Multimodal Swimming. IEEE/ASME Transactions on Mechatronics, 2018, 23, 1641-1652.	5.8	51
39	A Survey of Underwater Multi-Robot Systems. IEEE/CAA Journal of Automatica Sinica, 2022, 9, 1-18.	13.1	50
40	Mechanical design and motion control of a biomimetic robotic dolphin. Advanced Robotics, 2007, 21, 499-513.	1.8	49
41	Dolphin-like propulsive mechanism based on an adjustable Scotch yoke. Mechanism and Machine Theory, 2009, 44, 603-614.	4.5	49
42	A Continuous-Time Algorithm for Distributed Optimization Based on Multiagent Networks. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 2700-2709.	9.3	49
43	Amphibious Pattern Design of a Robotic Fish with Wheelâ€propellerâ€fin Mechanisms. Journal of Field Robotics, 2013, 30, 702-716.	6.0	48
44	A Closed-Loop Controlled Nanomanipulation System for Probing Nanostructures Inside Scanning Electron Microscopes. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1233-1241.	5.8	48
45	Underwater Bioinspired Propulsion: From Inspection to Manipulation. IEEE Transactions on Industrial Electronics, 2020, 67, 7629-7638.	7.9	48
46	MAS-Based Energy Management Strategies for a Hybrid Energy Generation System. IEEE Transactions on Industrial Electronics, 2016, 63, 3756-3764.	7.9	47
47	Extended State Observer-Based Controller With Model Predictive Governor for 3-D Trajectory Tracking of Underactuated Underwater Vehicles. IEEE Transactions on Industrial Informatics, 2021, 17, 6114-6124.	11.3	46
48	Control and Optimization of a Bionic Robotic Fish Through a Combination of CPG model and PSO. Neurocomputing, 2019, 337, 144-152.	5.9	45
49	Distributed Power Management for Dynamic Economic Dispatch in the Multimicrogrids Environment. IEEE Transactions on Control Systems Technology, 2019, 27, 1651-1658.	5.2	45
50	A modified YOLOv3 detection method for vision-based water surface garbage capture robot. International Journal of Advanced Robotic Systems, 2020, 17, 172988142093271.	2.1	45
51	Robust stability of stochastic fuzzy delayed neural networks with impulsive time window. Neural Networks, 2015, 67, 84-91.	5.9	44
52	Temporally Identity-Aware SSD With Attentional LSTM. IEEE Transactions on Cybernetics, 2020, 50, 2674-2686.	9.5	44
53	Kinematic Comparison of Forward and Backward Swimming and Maneuvering in a Self-Propelled Sub-Carangiform Robotic Fish. Journal of Bionic Engineering, 2014, 11, 199-212.	5.0	42
54	Development of a power line inspection robot with hybrid operation modes. , 2017, , .		40

#	Article	IF	Citations
55	Vision-Based Target-Following Guider for Mobile Robot. IEEE Transactions on Industrial Electronics, 2019, 66, 9360-9371.	7.9	40
56	Image Dynamics-Based Visual Servoing for Quadrotors Tracking a Target With a Nonlinear Trajectory Observer. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 376-384.	9.3	40
57	Leader-Following Formation Control of Multiple Mobile Robots. , 0, , .		38
58	Development of Multi-mode Biomimetic Robotic Fish Based on Central Pattern Generator. , 2006, , .		36
59	Implementing Flexible and Fast Turning Maneuvers of Multijoint Robotic Fish. Research on Intelligent Manufacturing, 2020, , 47-69.	0.3	36
60	Joint Anchor-Feature Refinement for Real-Time Accurate Object Detection in Images and Videos. IEEE Transactions on Circuits and Systems for Video Technology, 2021, 31, 594-607.	8.3	36
61	Parameter Optimization of Simplified Propulsive Model for Biomimetic Robot Fish. , 0, , .		34
62	Motion Control Strategies for a Repetitive Leaping Robotic Dolphin. IEEE/ASME Transactions on Mechatronics, 2019, 24, 913-923.	5.8	34
63	A framework for biomimetic robot fish's design and its realization. , 0, , .		33
64	Towards an Esox lucius inspired multimodal robotic fish. Science China Information Sciences, 2015, 58, 1-13.	4.3	33
65	IWSCR: An Intelligent Water Surface Cleaner Robot for Collecting Floating Garbage. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 6358-6368.	9.3	32
66	Neural network for solving Nash equilibrium problem in application of multiuser power control. Neural Networks, 2014, 57, 73-78.	5.9	31
67	Coordinated Transport by Multiple Biomimetic Robotic Fish in Underwater Environment. IEEE Transactions on Control Systems Technology, 2007, 15, 658-671.	5.2	30
68	A survey on fabrication, control, and hydrodynamic function of biomimetic robotic fish. Science China Technological Sciences, 2017, 60, 1365-1380.	4.0	29
69	A NSGA-II-Based Calibration Algorithm for Underwater Binocular Vision Measurement System. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 794-803.	4.7	29
70	Exploration of swimming performance for a biomimetic multi-joint robotic fish with a compliant passive joint. Bioinspiration and Biomimetics, 2021, 16, 026007.	2.9	29
71	An Integrative Control Method for Bio-Inspired Dolphin Leaping: Design and Experiments. IEEE Transactions on Industrial Electronics, 2016, 63, 3108-3116.	7.9	28
72	Average Quasi-Consensus Algorithm for Distributed Constrained Optimization: Impulsive Communication Framework. IEEE Transactions on Cybernetics, 2020, 50, 351-360.	9.5	28

#	Article	IF	Citations
73	Underwater Target Tracking Control of an Untethered Robotic Fish With a Camera Stabilizer. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 6523-6534.	9.3	28
74	Development of a Whale-Shark-Inspired Gliding Robotic Fish With High Maneuverability. IEEE/ASME Transactions on Mechatronics, 2020, 25, 2824-2834.	5.8	28
75	Distributed Energy Management Strategy for Reaching Cost-Driven Optimal Operation Integrated With Wind Forecasting in Multimicrogrids System. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 1643-1651.	9.3	27
76	Design and Analysis of a Wearable Upper Limb Rehabilitation Robot with Characteristics of Tension Mechanism. Applied Sciences (Switzerland), 2020, 10, 2101.	2.5	27
77	Dynamic modeling of a CPG-governed multijoint robotic fish. Advanced Robotics, 2013, 27, 275-285.	1.8	26
78	CPG-based Sensory Feedback Control for Bio-inspired Multimodal Swimming. International Journal of Advanced Robotic Systems, 2014, 11, 170.	2.1	26
79	Modular design and initial gait study of an amphibian robotic turtle. , 2007, , .		25
80	Precise planar motion measurement of a swimming multi-joint robotic fish. Science China Information Sciences, 2016, 59, 1.	4.3	25
81	Realâ€time segmentation of various insulators using generative adversarial networks. IET Computer Vision, 2018, 12, 596-602.	2.0	25
82	Linear impulsive control system with impulse time windows. JVC/Journal of Vibration and Control, 2017, 23, 111-118.	2.6	24
83	Integral-based event-triggered fault estimation and impulsive fault-tolerant control for networked control systems applied to underwater vehicles. Neurocomputing, 2021, 442, 36-47.	5.9	24
84	Discrete-time zeroing neural network of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si9.svg"><mml:mrow><mml:mi>O</mml:mi><mml:mo>(</mml:mo><mml:msup><mml:mi>Ï„</mml:mi><mml:mn>4</mml:mn></mml:msup></mml:mrow> for online solving time-varying nonlinear optimization problem: Application to manipulator motion generation. Journal of the Franklin Institute, 2021, 358, 7203-7220.	3.4	24
85	Multimodal swimming control of a robotic fish with pectoral fins using a CPG network. Science Bulletin, 2012, 57, 1209-1216.	1.7	23
86	Mechatronic design and implementation of a novel gliding robotic dolphin. , 2015, , .		23
87	Energy Analysis of a CPG-controlled Miniature Robotic Fish. Journal of Bionic Engineering, 2018, 15, 260-269.	5.0	23
88	Design and Control of a Two-Motor-Actuated Tuna-Inspired Robot System. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 4670-4680.	9.3	23
89	Reaction-Wheel-Based Roll Stabilization for a Robotic Fish Using Neural Network Sliding Mode Control. IEEE/ASME Transactions on Mechatronics, 2020, 25, 1904-1911.	5.8	23
90	Dynamic Modelling of a CPG-Controlled Amphibious Biomimetic Swimming Robot. International Journal of Advanced Robotic Systems, 2013, 10, 199.	2.1	22

#	Article	IF	Citations
91	A Loss-Minimization Port-Controlled Hamilton Scheme of Induction Motor for Electric Vehicles. IEEE/ASME Transactions on Mechatronics, 2015, 20, 2645-2653.	5.8	21
92	On a Miniature Free-Swimming Robotic Fish with Multiple Sensors. International Journal of Advanced Robotic Systems, 2016, 13, 62.	2.1	21
93	Model Predictive Control-Based Depth Control in Gliding Motion of a Gliding Robotic Dolphin. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 5466-5477.	9.3	21
94	3-D Path Planning With Multiple Motions for a Gliding Robotic Dolphin. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 2904-2915.	9.3	21
95	Control and Coordination of Multiple Biomimetic Robotic Fish. IEEE Transactions on Control Systems Technology, 2007, 15, 176-183.	5.2	20
96	CPG parameter search for a biomimetic robotic fish based on particle swarm optimization. , 2012, , .		20
97	Sliding mode fuzzy control-based path-following control for a dolphin robot. Science China Information Sciences, 2018, 61, 1.	4.3	20
98	A Switched Integral-Based Event-Triggered Control of Uncertain Nonlinear Time-Delay System With Actuator Saturation. IEEE Transactions on Cybernetics, 2022, 52, 11335-11347.	9.5	20
99	Design and Control of an Embedded Vision Guided Robotic Fish with Multiple Control Surfaces. Scientific World Journal, The, 2014, 2014, 1-13.	2.1	19
100	Design and attitude control of a novel robotic jellyfish capable of 3D motion. Science China Information Sciences, 2019, 62, 1.	4.3	19
101	Gliding Motion Regulation of a Robotic Dolphin Based on a Controllable Fluke. IEEE Transactions on Industrial Electronics, 2020, 67, 2945-2953.	7.9	19
102	Development of a High-Speed Swimming Robot With the Capability of Fish-Like Leaping. IEEE/ASME Transactions on Mechatronics, 2022, 27, 3579-3589.	5.8	19
103	CPG-based dynamics modeling and simulation for a biomimetic amphibious robot. , 2009, , .		18
104	An Incidental Delivery Based Method for Resolving Multirobot Pairwised Transportation Problems. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 1852-1866.	8.0	18
105	Toward a Novel Robotic Manta With Unique Pectoral Fins. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 1663-1673.	9.3	18
106	Toward a Maneuverable Miniature Robotic Fish Equipped With a Novel Magnetic Actuator System. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 2327-2337.	9.3	17
107	Boosting dark channel dehazing via weighted local constant assumption. Signal Processing, 2020, 171, 107453.	3.7	17
108	Real-Time Path Planning and Following of a Gliding Robotic Dolphin Within a Hierarchical Framework. IEEE Transactions on Vehicular Technology, 2021, 70, 3243-3255.	6.3	17

#	Article	IF	Citations
109	A Novel 3D LiDAR SLAM Based on Directed Geometry Point and Sparse Frame. IEEE Robotics and Automation Letters, 2021, 6, 374-381.	5.1	17
110	A parallel algorithm for visual tracking of multiple free-swimming robot fishes based on color information. , 0, , .		16
111	Visual measurement and control for underwater robots: A survey. , 2013, , .		16
112	Fault-Tolerant Control of a CPG-Governed Robotic Fish. Engineering, 2018, 4, 861-868.	6.7	16
113	Bottom-level motion control for robotic fish to swim in groups: modeling and experiments. Bioinspiration and Biomimetics, 2019, 14, 046001.	2.9	16
114	Efficient Cooperative Structured Control for a Multijoint Biomimetic Robotic Fish. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2506-2516.	5.8	16
115	Decoupled Metric Network for Single-Stage Few-Shot Object Detection. IEEE Transactions on Cybernetics, 2023, 53, 514-525.	9.5	16
116	Design and Optimization of an Untethered High-Performance Robotic Tuna. IEEE/ASME Transactions on Mechatronics, 2022, 27, 4132-4142.	5.8	16
117	Mixed Visual Control Method for Robots With Self-Calibrated Stereo Rig. IEEE Transactions on Instrumentation and Measurement, 2010, 59, 470-479.	4.7	15
118	An Optimal Task Allocation Approach for Large-Scale Multiple Robotic Systems With Hierarchical Framework and Resource Constraints. IEEE Systems Journal, 2018, 12, 3877-3880.	4.6	15
119	Hydrodynamic Analysis and Verification of an Innovative Whale Shark-like Underwater Glider. Journal of Bionic Engineering, 2020, 17, 123-133.	5.0	15
120	DesignÂand analysis of a novel tendon-driven continuum robotic dolphin. Bioinspiration and Biomimetics, 2021, 16, 065002.	2.9	15
121	A tracking controller for motion coordination of multiple mobile robots. , 2005, , .		14
122	Preliminary development of a biomimetic amphibious robot capable of multi-mode motion. , 2007, , .		14
123	A Robust Visual Person-Following Approach for Mobile Robots in Disturbing Environments. IEEE Systems Journal, 2020, 14, 2965-2968.	4.6	14
124	Design of vortex finder structure for decreasing the pressure drop of a cyclone separator. Korean Journal of Chemical Engineering, 2020, 37, 743-754.	2.7	14
125	A Novel Camera Calibration Pattern Robust to Incomplete Pattern Projection. IEEE Sensors Journal, 2021, 21, 10051-10060.	4.7	14
126	A Novel Vision-Based Grasping Method Under Occlusion for Manipulating Robotic System. IEEE Sensors Journal, 2020, 20, 10996-11006.	4.7	14

#	Article	IF	Citations
127	Optimal design and motion control of biomimetic robotic fish. Science in China Series F: Information Sciences, 2008, 51, 535-549.	1.1	13
128	Geometric topology based cooperation for multiple robots in adversarial environments. Control Engineering Practice, 2008, 16, 1092-1100.	5.5	13
129	Barrier-Based Adaptive Line-of-Sight 3-D Path-Following System for a Multijoint Robotic Fish With Sideslip Compensation. IEEE Transactions on Cybernetics, 2023, 53, 4204-4217.	9.5	13
130	Basic motion control of a free-swimming biomimetic robot fish. , 0, , .		12
131	An adjustable scotch yoke mechanism for robotic dolphin. , 2007, , .		12
132	Bio-inspired design and realization of a novel multimode amphibious robot. , 2009, , .		12
133	A Robust Game-Based Algorithm for Downlink Joint Resource Allocation in Hierarchical OFDMA Femtocell Network System. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 2445-2455.	9.3	12
134	Nonlinear model predictive position control for a tail-actuated robotic fish. Nonlinear Dynamics, 2020, 101, 2235-2247.	5.2	12
135	An angle-changeable tracked robot with human-robot interaction in unstructured environments. Assembly Automation, 2020, 40, 565-575.	1.7	12
136	A real-time semantic visual SLAM approach with points and objects. International Journal of Advanced Robotic Systems, 2020, 17, 172988142090544.	2.1	12
137	Adaptive Relay Selection Strategy in Underwater Acoustic Cooperative Networks: A Hierarchical Adversarial Bandit Learning Approach. IEEE Transactions on Mobile Computing, 2023, 22, 1938-1949.	5.8	12
138	Three-dimensional dynamic modelling of robotic fish: simulations and experiments. Transactions of the Institute of Measurement and Control, 2008, 30, 239-258.	1.7	11
139	Towards development of a slider-crank centered self-propelled dolphin robot. Advanced Robotics, 2013, 27, 971-977.	1.8	11
140	Towards a miniature self-propelled jellyfish-like swimming robot. International Journal of Advanced Robotic Systems, 2016, 13, 172988141666679.	2.1	11
141	Spiraling Motion of a Gliding Robotic Dolphin Based on the 3-D Dynamic Model. , 2018, , .		11
142	Adaptive Quantized Estimation Fusion Using Strong Tracking Filtering and Variational Bayesian. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 899-910.	9.3	11
143	A Two-Stream CNN With Simultaneous Detection and Segmentation for Robotic Grasping. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 1167-1181.	9.3	11
144	Development of modular and reconfigurable biomimetic robotic fish with undulating fin. , 2007, , .		10

#	Article	IF	Citations
145	Modeling neural control of robotic fish with pectoral fins using a CPG-based network. , 2009, , .		10
146	Analysis and verification of a miniature dolphin-like underwater glider. Industrial Robot, 2016, 43, 628-635.	2.1	10
147	An Underwater Micro Cable-Driven Pan-Tilt Binocular Vision System With Spherical Refraction Calibration. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-13.	4.7	10
148	Development and Control of a Bioinspired Robotic Remora for Hitchhiking. IEEE/ASME Transactions on Mechatronics, 2022, 27, 2852-2862.	5.8	10
149	Development of multiple robotic fish cooperation platform. International Journal of Systems Science, 2007, 38, 257-268.	5.5	9
150	Design and implementation of a novel biomimetic robotic jellyfish. , 2013, , .		9
151	A human-following approach using binocular camera. , 2017, , .		9
152	Development and path planning of a novel unmanned surface vehicle system and its application to exploitation of Qarhan Salt Lake. Science China Information Sciences, 2019, 62, 1.	4.3	9
153	Design and Analysis of a Chinese Medicine Based Humanoid Robotic Arm Massage System. Applied Sciences (Switzerland), 2019, 9, 4294.	2.5	9
154	Designing Zero-Gradient-Sum Protocols for Finite-Time Distributed Optimization Problem. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 4569-4577.	9.3	9
155	Visual-Gyroscope-Wheel Odometry With Ground Plane Constraint for Indoor Robots in Dynamic Environment. , 2021, 5, 1-4.		9
156	Parameter Design for a Central Pattern Generator Based Locomotion Controller. Lecture Notes in Computer Science, 2008, , 352-361.	1.3	9
157	Scene Coordinate Regression Network With Global Context-Guided Spatial Feature Transformation for Visual Relocalization. IEEE Robotics and Automation Letters, 2021, 6, 5737-5744.	5.1	9
158	Dynamic Modeling and Hybrid Fireworks Algorithm-Based Path Planning of an Amphibious Robot. Research on World Agricultural Economy, 2022, 02, .	1.3	9
159	Dynamic modeling and its application for a CPG-coupled robotic fish. , 2011, , .		8
160	Design and implementation of a robotic shark with a novel embedded vision system. , 2016, , .		8
161	Bifurcation behaviors of an Euler discretized inertial delayed neuron model. Science China Technological Sciences, 2016, 59, 418-427.	4.0	8
162	Design and 3D Motion Modeling of a 300-m Gliding Robotic Dolphin * *This work was supported by the National Natural Science Foundation of China (nos. 61603388, 61375102, 61633017 and 61421004), the Beijing Natural Science Foundation (nos. 3141002 and 4164103), and by the Early Career Development Award of SKLMCCS.. IFAC-PapersOnLine, 2017, 50, 12685-12690.	0.9	8

#	Article	IF	Citations
163	Design and Yaw Control of a Two-Motor-Actuated Biomimetic Robotic Fish. , 2019, , .		8
164	Performance Improvement of a High-Speed Swimming Robot for Fish-Like Leaping. IEEE Robotics and Automation Letters, 2022, 7, 1936-1943.	5.1	8
165	A GNN for repetitive motion generation of four-wheel omnidirectional mobile manipulator with nonconvex bound constraints. Information Sciences, 2022, 607, 537-552.	6.9	8
166	An Adaptive Task Assignment Method for Multiple Mobile Robots via Swarm Intelligence Approach. , 0, , .		7
167	Dynamics and Control of Turning Maneuver for Biomimetic Robotic Fish. , 2006, , .		7
168	Dynamic modeling and experimental validation of biomimetic robotic fish. , 2006, , .		7
169	Formation Control of Multiple Biomimetic Robotic Fish. , 2006, , .		7
170	Dynamic Analysis and Control Synthesis of a Link-Based Dolphin-Like Robot Capable of Three-Dimensional Movements. Advanced Robotics, 2009, 23, 1299-1313.	1.8	7
171	Design and implementation of a novel CPG-based locomotion controller for robotic dolphin. , 2010, , .		7
172	Design and control of a fish-inspired multimodal swimming robot. , 2011, , .		7
173	Design and Implementation of a Magnetically Actuated Miniature Robotic Fish * *This work was supported by the National Natural Science Foundation of China (nos. 61633020, 61603388, 61633004 and) Tj ETQq1 1 0.784314 rgBT Development Award of SKLMCCS.. IFAC-PapersOnLine, 2017, 50, 6851-6856.	6.9	7
174	TSSD: Temporal Single-Shot Detector Based on Attention and LSTM. , 2018, , .		7
175	A Novel Sparse Geometric 3-D LiDAR Odometry Approach. IEEE Systems Journal, 2021, 15, 1390-1400.	4.6	7
176	Noise-tolerant neural algorithm for online solving Yang-Baxter-type matrix equation in the presence of noises: A control-based method. Neurocomputing, 2021, 424, 84-96.	5.9	7
177	Design and analysis of shoulder joint exoskeleton rehabilitation mechanism based on gear and rack transmission. AIP Advances, 2021, 11, .	1.3	7
178	Three-Dimensional Path Following Control of an Underactuated Robotic Dolphin Using Deep Reinforcement Learning. , 2020, , .		7
179	Optimized design and implementation of biomimetic robotic dolphin. , 2005, , .		6
180	Dynamic Modeling of Three-Dimensional Swimming for Biomimetic Robotic Fish. , 2006, , .		6

#	Article	IF	Citations
181	CPG-based behavior design and implementation for a biomimetic amphibious robot. , 2011, , .		6
182	An improved multimodal robotic fish modelled after Esox lucíus. , 2013, , .		6
183	Active visual tracking of free-swimming robotic fish based on automatic recognition. , 2014, , .		6
184	Implementing 3-D high maneuvers with a novel biomimetic robotic fish. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 4861-4866.	0.4	6
185	A New Projected Active Set Conjugate Gradient Approach for Taylor-Type Model Predictive Control: Application to Lower Limb Rehabilitation Robots With Passive and Active Rehabilitation. Frontiers in Neurorobotics, 2020, 14, 559048.	2.8	6
186	A Novel Visual Sensor Stabilization Platform for Robotic Sharks Based on Improved LADRC and Digital Image Algorithm. Sensors, 2020, 20, 4060.	3.8	6
187	A Visual Leader-Following Approach With a T-D-R Framework for Quadruped Robots. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 2342-2354.	9.3	6
188	Coordinating Dual-Mode Biomimetic Robotic Fish in Box-Pushing Task. Lecture Notes in Computer Science, 2005, , 815-824.	1.3	6
189	Body-Deformation Steering Approach to Guide a Multi-mode Amphibious Robot on Land. Lecture Notes in Computer Science, 2008, , 1021-1030.	1.3	6
190	Pruning-Based YOLOv4 Algorithm for Underwater Gabage Detection. , 2021, , .		6
191	Locomotion Optimization of a Tendon-Driven Robotic Fish With Variable Passive Tail Fin. IEEE Transactions on Industrial Electronics, 2023, 70, 4983-4992.	7.9	6
192	PLJ-SLAM: Monocular Visual SLAM With Points, Lines, and Junctions of Coplanar Lines. IEEE Sensors Journal, 2022, 22, 15465-15476.	4.7	6
193	Dynamic Modeling of Multi-link Swimming Robot Capable of 3-D Motion. , 2007, , .		5
194	Bio-inspired design of body wave and morphology in fish swimming based on linear density. , 2009, , .		5
195	Development of the Embedded Vision System: A Survey. Measurement and Control, 2009, 42, 216-221.	1.8	5
196	An embedded vision system for robotic fish navigation. , 2010, , .		5
197	Underwater cave search and entry using a robotic fish with embedded vision. , 2014, , .		5
198	Bifurcation analysis of a two-dimensional simplified Hodgkinâ€“Huxley model exposed to external electric fields. Neural Computing and Applications, 2014, 24, 37-44.	5.6	5

#	Article	IF	Citations
199	Enhancing swimming performance of a biomimetic robotic fish by optimizing oscillator phase differences of a CPG model. , 2015, , .		5
200	Caterpillar-Like Climbing Method Incorporating a Dual-Mode Optimal Controller. IEEE Transactions on Automation Science and Engineering, 2015, 12, 1492-1503.	5.2	5
201	Design of a camera stabilizer system for robotic fish based on feedback-feedforward control. , 2016, , .		5
202	Hydrodynamic analysis of a gliding robotic dolphin based on Computational Fluid Dynamics. , 2016, , .		5
203	Relative closeness ranking of Kalman filtering with multiple mismatched measurement noise covariances. IET Control Theory and Applications, 2018, 12, 1133-1140.	2.1	5
204	A Grasping CNN with Image Segmentation for Mobile Manipulating Robot. , 2019, , .		5
205	Cooperative Target Tracking in Aquatic Environment Using Dual Robotic Dolphins. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 4782-4792.	9.3	5
206	Path-Following Control of an Amphibious Robotic Fish Using Fuzzy-Linear Model Predictive Control Approach. , 2020, , .		5
207	Stability of nonlinear distributed delay system with parameter uncertainties: Integralâ€based eventâ€triggered impulsive control strategy. International Journal of Robust and Nonlinear Control, 2021, 31, 9055-9073.	3.7	5
208	A biomimetic fish finlet with a liquid metal soft sensor for proprioception and underwater sensing. Bioinspiration and Biomimetics, 2021, 16, 065007.	2.9	5
209	An advanced form-finding of tensegrity structures aided with noise-tolerant zeroing neural network. Neural Computing and Applications, 2022, 34, 6053-6066.	5.6	5
210	A Collision-Free Person-Following Approach Based on Path Planning. , 2020, , .		5
211	An Open-Source, Fiducial-Based, Underwater Stereo Visual-Inertial Localization Method with Refraction Correction. , 2021, , .		5
212	A Hierarchical Stabilization Control Method for a Three-Axis Gimbal Based on Seaâ€“Sky-Line Detection. Sensors, 2022, 22, 2587.	3.8	5
213	Hierarchical Estimation-Based LiDAR Odometry With Scan-to-Map Matching and Fixed-Lag Smoothing. IEEE Transactions on Intelligent Vehicles, 2023, 8, 1607-1623.	12.7	5
214	Behaviroal design and strategy for cooperative multiple-biomimetic-robot-fish system. , 2005, , .		4
215	Dynamic Modeling of Robotic Fish Using Schiehien's Method. , 2006, , .		4
216	Visual Tracking of Multiple Robotic Fish for Cooperative Control. , 2006, , .		4

#	Article	IF	Citations
217	Construction and control of biomimetic robotic dolphin. , 0, , .		4
218	Collision-free motion planning for a biomimetic robotic fish based on numerical flow field. , 2006, , .		4
219	Coordinated control of two biomimetic robotic fish in pushing-object task. IET Control Theory and Applications, 2007, 1, 1200-1207.	2.1	4
220	Step function based turning maneuvers in biomimetic robotic fish. , 2009, , .		4
221	Robust gait control in biomimetic amphibious robot using central pattern generator. , 2010, , .		4
222	A closed-loop method to generate fast C-start for a robotic fish. , 2011, , .		4
223	DESIGN AND CFD ANALYSIS FOR A BIOMIMETIC DOLPHIN-LIKE UNDERWATER GLIDER. , 2015, , .		4
224	Dynamics modeling and simulation for a gliding robotic dolphin. , 2016, , .		4
225	Flippers-based turning analysis and implementation of a dolphin robot. , 2017, , .		4
226	Determining the minimal mulch film damage caused by the up-film transplanter. Advances in Mechanical Engineering, 2018, 10, 168781401876677.	1.6	4
227	3-D Motion Analysis and Implementation of a Developed Gliding Robotic Dolphin. , 2019, , .		4
228	Locomotion Control of Robotic Fish with a Hierarchical Framework Combining Spiking Neural Networks and CPGs. , 2019, , .		4
229	Mechatronic Design of a Novel Robotic Manta with Pectoral Fins. , 2019, , .		4
230	Design of a Miniature Underwater Angle-of-Attack Sensor and Its Application to a Self-Propelled Robotic Fish. IEEE Journal of Oceanic Engineering, 2020, 45, 1295-1307.	3.8	4
231	Design and Analysis of a Flexible, Elastic, and Rope-Driven Parallel Mechanism for Wrist Rehabilitation. Applied Bionics and Biomechanics, 2020, 2020, 1-13.	1.1	4
232	A Fireworks Algorithm Based Path Planning Method for Amphibious Robot. , 2021, , .		4
233	Online Optimization of Normalized CPGs for a Multi-Joint Robotic Fish. , 2021, , .		4
234	Comparative Simulation of Mobile Underwater Acoustic Communication Network Based on OPNET. , 2020, , .		4

#	Article	IF	Citations
235	The Unified Task Assignment for Underwater Data Collection With Multi-AUV System: A Reinforced Self-Organizing Mapping Approach. IEEE Transactions on Neural Networks and Learning Systems, 2024, 35, 1833-1846.	11.3	4
236	A coordination method for multiple biomimetic robotic fish box-pushing. , 0, , .		3
237	Design Framework and Motion Control for Biomimetic Robot Fish. , 0, , .		3
238	Robotic fish motion planning under inherent kinematic constraints. , 2006, , .		3
239	A multi-mode biomimetic amphibious robot. , 2008, , .		3
240	Platform-level design for a biomimetic amphibious robot. , 2009, , .		3
241	Swimming performance of a robotic fish in both straight swimming and making a turn. , 2015, , .		3
242	Design and implementation of a robotic dolphin for water quality monitoring. , 2016, , .		3
243	A Real-time and Unsupervised Advancement Scheme for Underwater Machine Vision. , 2017, , .		3
244	A real-time underwater robotic visual tracking strategy based on image restoration and kernelized correlation filters. , 2018, , .		3
245	Dual Refinement Network for Single-Shot Object Detection. , 2019, , .		3
246	Controlling the depth of a gliding robotic dolphin using dual motion control modes. Science China Information Sciences, 2020, 63, 1.	4.3	3
247	SVD based scale transform invariant observable degree for LTI system. Science China Information Sciences, 2021, 64, 1.	4.3	3
248	Gliding Motion Optimization for a Biomimetic Gliding Robotic Fish. IEEE/ASME Transactions on Mechatronics, 2022, 27, 1629-1639.	5.8	3
249	Prediction model-based learning adaptive control for underwater grasping of a soft manipulator. International Journal of Intelligent Robotics and Applications, 2021, 5, 337-353.	2.8	3
250	Central Pattern Generator Based Control and Implementation for a Pectoral-fin Propelled Robotic Fish. Jiqiren/Robot, 2010, 32, 248-255.	0.4	3
251	Separate Control Strategy for a Biomimetic Gliding Robotic Fish. IEEE/ASME Transactions on Mechatronics, 2022, 27, 2535-2544.	5.8	3
252	TRACKING CONTROL FOR A BIOMIMETIC ROBOTIC FISH GUIDED BY ACTIVE VISION. International Journal of Robotics and Automation, 2016, 31, .	0.1	3

#	Article	IF	Citations
253	Line-of-sight based three-dimensional path following control for an underactuated robotic dolphin. Science China Information Sciences, 2021, 64, 1.	4.3	3
254	A Self-identifying Checkerboard-like Pattern for Camera Calibration. , 2020, , .		3
255	Real-Time Digital Video Stabilization of Bioinspired Robotic Fish Using Estimation-and-Prediction Framework. IEEE/ASME Transactions on Mechatronics, 2022, 27, 4281-4292.	5.8	3
256	A novel robotic visual perception framework for underwater operation. Frontiers of Information Technology and Electronic Engineering, 2022, 23, 1602-1619.	2.6	3
257	An SNN-CPG Hybrid Locomotion Control for Biomimetic Robotic Fish. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 105, .	3.4	3
258	Design of a free-swimming biomimetic robot fish. , 0, , .		2
259	Performance optimization and coordinated control of multiple biomimetic robotic fish. , 2005, , .		2
260	Development and control of dolphin-like underwater vehicle. , 2008, , .		2
261	Kinematics modeling and simulation for an amphibious robot: Design and implementation. , 2009, , .		2
262	Towards development of link-based robotic dolphin: Experiences and lessons. , 2009, , .		2
263	Mechanical design of a slider-crank centered robotic dolphin. , 2012, , .		2
264	Target tracking of robotic fish based on embedded vision and CPG model. , 2013, , .		2
265	MECHANICAL DESIGN OF A TWO-JOINT ROBOTIC FISH. , 2015, , .		2
266	2-DOF Camera Stabilization Platform for Robotic Fish Based on Active Disturbance Rejection Control. , 2019, , .		2
267	A Vision-Based Path Planning and Following System for a Miniature Robotic Fish. , 2019, , .		2
268	Control of Yaw and Pitch Maneuvers of a Multilink Dolphin Robot. Research on Intelligent Manufacturing, 2020, , 123-148.	0.3	2
269	Leaping Control of Self-propelled Robotic Dolphin. Research on Intelligent Manufacturing, 2020, , 149-172.	0.3	2
270	A robotic grasping approach with elliptical cone-based potential fields under disturbed scenes. International Journal of Advanced Robotic Systems, 2021, 18, 172988142098573.	2.1	2

#	Article	IF	Citations
271	3D path-following control of robotic penguin: an ETFLMPC approach. Nonlinear Dynamics, 2021, 104, 1415-1427.	5.2	2
272	Find Outliers of Image Edge Consistency by Weighted Local Linear Regression with Equality Constraints. Sensors, 2021, 21, 2563.	3.8	2
273	A Novel Underwater Image Synthesis Method Based on a Pixel-Level Self-Supervised Training Strategy. , 2021, , .		2
274	DESIGN AND IMPLEMENTATION OF A SMART ROBOTIC SHARK WITH MULTI-SENSORS. , 2015, , .		2
275	Ground Simulation Tests in Two-Dimensional Dynamic Acceleration Environment. Applied Sciences (Switzerland), 2020, 10, 910.	2.5	2
276	A Modified Line-of-Sight Method for Path Tracking Applied to Robotic Fish. , 2020, , .		2
277	A Bionic Robotic Fish Detection Method by Using YOLOv3 Algorithm. , 2020, , .		2
278	Control and coordination of biomimetic robotic fish. , 2005, , .		1
279	Motion Planning of Cooperative Disk-Pushing for Multiple Biomimetic Robotic Fish. , 0, , .		1
280	Cooperative control of multiple robotic fish in a disk-pushing task. , 2006, , .		1
281	Underwater transportation of multiple fish-like robots using situation based action selection. , 0, , .		1
282	A Coordination Method for Multiple Biomimetic Robotic Fish in Underwater Transport Task. Proceedings of the American Control Conference, 2007, , .	0.0	1
283	Turning analysis and its implementation of link-based dolphin-like robots. , 2008, , .		1
284	Closed-loop precise turning control for a BCF-mode robotic fish. , 2010, , .		1
285	Efficient kinematic solution to a multi-robot with serial and parallel mechanisms. , 2010, , .		1
286	Dolphin-like Swimming Modeling for a Biomimetic Amphibious Robot. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 9367-9372.	0.4	1
287	Development of a novel robotic jellyfish based on mechanical structure drive and barycenter adjustment. , 2015, , .		1
288	A novel active tracking system for robotic fish based on cascade control structure. , 2016, , .		1

#	Article	IF	Citations
289	Design and fabrication of a miniature underwater angle of attack sensor for robotic fish. , 2017, , .		1
290	An Operation Management Cloud Ecosystem for Smart Buildings Based on Internet of Things. , 2017, , .		1
291	Fault-Tolerant Speed Control of a Biomimetic Multijoint Robotic Fish. , 2018, , .		1
292	Effect of Compliant Passive Joint on Swimming Performance for a Multi-Joint Robotic Fish. , 2019, , .		1
293	Motion Optimization for a Robotic Fish Based on Adversarial Structured Control. , 2019, , .		1
294	An Unsupervised Grasp Detection for Water-surface Object Collection. , 2019, , .		1
295	Joint Anchor-Feature Refinement for Real-Time Accurate Object Detection in Images and Videos. , 2021, , 89-124.		1
296	Robot Navigation Based on Situational Awareness. IEEE Transactions on Cognitive and Developmental Systems, 2022, 14, 869-881.	3.8	1
297	A Novel Geometric Calibration Method for Active Stereovision System. , 2021, , .		1
298	Modeling and Control of a Link-Based Dolphin-Like Robot Capable of 3D Movements. Lecture Notes in Computer Science, 2008, , 982-991.	1.3	1
299	ALRe: Outlier Detection for Guided Refinement. Lecture Notes in Computer Science, 2020, , 788-802.	1.3	1
300	A Hierarchical LiDAR Odometry via Maximum Likelihood Estimation With Tightly Associated Distributions. IEEE Transactions on Vehicular Technology, 2022, 71, 10254-10268.	6.3	1
301	A hierarchical framework for cooperative control of multiple bio-mimetic robotic fish. , 2005, , .		0
302	Platform-based design of an embedded control system for three-dimensional robotic fish. , 2008, , .		0
303	Bio-inspired Center Pattern Generator based control models. , 2010, , .		0
304	Modeling and simulation of porpoising for a multilink dolphin robot. , 2011, , .		0
305	Underwater target search with robotic fish based on an improved Camshift algorithm. , 2013, , .		0
306	Parallel control and management system for biomimetic robotic fish based on ACP approach. , 2016, , .		0

#	Article	IF	Citations
307	Development of a Tetris Playing Robot Controlled by KNR. , 2018, , .		0
308	Editorial for Special Issue on Intelligent Control and Computing in Advanced Robotics. International Journal of Automation and Computing, 2018, 15, 513-514.	4.5	0
309	FnnmOS-ELM: A Flexible Neural Network Mixed Online Sequential Elm. Applied Sciences (Switzerland), 2019, 9, 3772.	2.5	0
310	Bioinspired Fish Body Wave Model Considering Linear Density. Research on Intelligent Manufacturing, 2020, , 25-45.	0.3	0
311	3D Maneuvering Control of a Robotic Fish. Research on Intelligent Manufacturing, 2020, , 101-121.	0.3	0
312	A Multi-Modal Edge Consistency Metric Based on Regression Robustness of Truncated SVD. IEEE Signal Processing Letters, 2021, 28, 1065-1069.	3.6	0
313	Towards Collision Detection, Localization and Force Estimation for a Soft Cable-driven Robot Manipulator. , 2021, , .		0
314	Model Predictive Control Based Path Following of an Amphibious Robot. , 2021, , .		0
315	Turning Control of a Tuna-Like BAUV for a Minimum Turning Radius. , 2021, , .		0
316	A Target Person Locating Framework Based on Distributed Odometries. , 2021, , .		0
317	Development of the Multiple Robot Fish Cooperation System. Lecture Notes in Computer Science, 2006, , 34-43.	1.3	0
318	Turning Control for a Modular Biomimetic Amphibious Robot Based on Variable Joint Number. Jiqiren/Robot, 2010, 32, 491-498.	0.4	0
319	Line-of-Sight Strategy-Based Path-Following System for a Multi-Joint Robotic Fish. , 2020, , .		0
320	Design of Cascade Control Framework for ROV Control and Simulation. , 2020, , .		0
321	Visual Pencil: Design of Portable Human-Computer Interaction Based on 2D Visual Tracking. , 2020, , .		0
322	Marine Autonomous Navigation for Biomimetic Underwater Robots Based on Deep Stereo Attention Network. , 2021, , .		0
323	Dynamic Rigid Bodies Mining and Motion Estimation Based on Monocular Camera. IEEE Transactions on Cybernetics, 2022, PP, 1-12.	9.5	0
324	A Tight Filtering and Smoothing Fusion Method With Feature Tracking for LiDAR Odometry. IEEE Sensors Journal, 2022, 22, 13622-13631.	4.7	0