

Huihuan Qian

List of Publications by Year in descending order

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Version: 2024-02-01

120
papers

968
citations

1039880

9
h-index

887953

17
g-index

121
all docs

121
docs citations

121
times ranked

870
citing authors

#	ARTICLE	IF	CITATIONS
1	Design and Control of a Wave-Driven Solar Tracker. IEEE Transactions on Automation Science and Engineering, 2023, 20, 1007-1019.	3.4	3
2	A Spatial Biarc Method for Inverse Kinematics and Configuration Planning of Concentric Cable-Driven Manipulators. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 4177-4186.	5.9	6
3	A collaborative robot for COVID-19 oropharyngeal swabbing. Robotics and Autonomous Systems, 2022, 148, 103917.	3.0	19
4	A Combined Planning Method Based on Biarc Curve and B�zier Curve for Concentric Cable-Driven Manipulators Working in Confined Environments. IEEE/ASME Transactions on Mechatronics, 2022, 27, 4475-4486.	3.7	2
5	Design and Optimization of a Magnetic Catcher for UAV Landing on Disturbed Aquatic Surface Platforms. , 2022, , .		2
6	A User-customized Automatic Music Composition System. , 2022, , .		1
7	Geometry optimization of solar thermoelectric generator under different operating conditions via Taguchi method. Energy Conversion and Management, 2021, 238, 114158.	4.4	34
8	Improving The Robot Localization Accuracy Using Range-only Data: An Optimization Approach. , 2021, , .		1
9	SongBot: An Interactive Music Generation Robotic System for Non-musicians Learning from A Song. , 2021, , .		0
10	Design of a Battery Carrying Barge for Enhancing Autonomous Sailboat's Endurance Capacity. , 2021, , .		2
11	Design and Energy Consumption Optimization of an Automatic Hybrid Sailboat. , 2021, , .		3
12	Computational Efficient Simulation of Kelvin Wake for Unmanned Surface Vehicles. , 2021, , .		0
13	Modeling and Implementation of Tacking for Wing Sail Land-Yacht. , 2021, , .		0
14	Crowd modeling based on purposiveness and a destination-driven analysis method. Frontiers of Information Technology and Electronic Engineering, 2021, 22, 1351-1369.	1.5	0
15	Collision Risk Assessment and Obstacle Avoidance Control for Autonomous Sailing Robots. , 2021, , .		2
16	An Efficient Parallel Self-assembly Planning Algorithm for Modular Robots in Environments with Obstacles. , 2021, , .		2
17	A Predictive Control Method for Stabilizing a Manipulator-based UAV Landing Platform on Fluctuating Marine Surface*. , 2021, , .		0
18	Toward Long-Term Sailing Robots: State of the Art From Energy Perspectives. Frontiers in Robotics and AI, 2021, 8, 787253.	2.0	6

#	ARTICLE	IF	CITATIONS
19	Cooperative Moving-Target Enclosing of Networked Vehicles With Constant Linear Velocities. IEEE Transactions on Cybernetics, 2020, 50, 798-809.	6.2	45
20	CCRobot-III: a Split-type Wire-driven Cable Climbing Robot for Cable-stayed Bridge Inspection. , 2020, , .		13
21	A Novel Solar Tracker Driven by Waves: From Idea to Implementation. , 2020, , .		2
22	ROLES OF MAGNETIC STRENGTH IN MAGNETO-ELASTOMER TOWARDS SWIMMING MECHANISM AND PERFORMANCE OF MINIATURE ROBOTS. International Journal of Robotics and Automation, 2020, 35, .	0.1	3
23	A Two-stage Automatic Latching System for The USVs Charging in Disturbed Berth. , 2020, , .		1
24	An Obstacle-crossing Strategy Based on the Fast Self-reconfiguration for Modular Sphere Robots. , 2020, , .		7
25	Robot-to-Robot Relative Pose Estimation based on Semidefinite Relaxation Optimization. , 2020, , .		9
26	OceanVoy: A Hybrid Energy Planning System for Autonomous Sailboat. , 2020, , .		9
27	FreeBOT: A Freeform Modular Self-reconfigurable Robot with Arbitrary Connection Point - Design and Implementation. , 2020, , .		44
28	Design and Optimization of a Wave Driven Solar Tracker for Floating Photovoltaic Plants. , 2019, , .		3
29	A New Turbine-Sail Coupled Propulsive System for Autonomous Sailboats*. , 2019, , .		1
30	An Adaptive Position Keeping Algorithm For Autonomous Sailboats. , 2019, , .		2
31	Obstacle Avoidance for Autonomous Sailboats via Reinforcement Learning with Coarse-to-fine Strategy. , 2019, , .		3
32	Wing Sail Land-yacht Modeling And System Verification. , 2019, , .		3
33	Collaborative Object Transportation by Multiple Robots with Onboard Object Localization Algorithm. , 2019, , .		3
34	Towards Long Duration Self-Sustainable Ocean Sampling System*. , 2019, , .		0
35	A Low-Cost, Wide-Range and Multi-Functional Vision Backend of Sailboat Research Testbed. , 2019, , .		2
36	Collision Avoidance for Autonomous Sailboats Based on RRS Protocol. , 2019, , .		3

#	ARTICLE	IF	CITATIONS
37	Trajectory Tracking of Unicycle-type Robots with Constraints. , 2018, , .		1
38	Hierarchical Reinforcement Learning Framework Towards Multi-Agent Navigation. , 2018, , .		15
39	Design and Control of A Hybrid Sailboat for Enhanced Tacking Maneuvers*. , 2018, , .		3
40	Tacking Control of an Autonomous Sailboat Based on Force Polar Diagram. , 2018, , .		7
41	Lidar-IMU Fusion for 2.5D Mapping. , 2018, , .		1
42	Posture Correction of Quadruped Robot for Adaptive Slope Walking. , 2018, , .		8
43	A Music Generation Model for Robotic Composers. , 2018, , .		2
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	Vibration-Based Anemometer Design for Mini Autonomous Sailboat. , 2018, , .		2
47	Jukepix: A Cross-Modality Approach to Transform Paintings into Music Segments. , 2018, , .		0
48	Trajectory Tracking for Leader-Follower Vehicle System with Velocity Constraints. , 2018, , .		0
49	Energy Optimization of Automatic Hybrid Sailboat. , 2018, , .		7
50	Vehicle Pose and Shape Estimation Through Multiple Monocular Vision. , 2018, , .		14
51	AIr-Chem: Authentic Intelligent Robotics for Chemistry. Journal of Physical Chemistry A, 2018, 122, 9142-9148.	1.1	36
52	Design of a rescue robot with a wearable suit augmenting high payloads rescue missions. , 2017, , .		3
53	Dual-spring AGV shock absorption system design: Dynamic analysis and simulations. , 2017, , .		1
54	Energy efficiency optimization of an interactive quadruped robot. , 2017, , .		2

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55	A vision-based perception framework for outdoor navigation tasks applicable to legged robots. , 2017, , .		3
56	Gait design and comparison study of a quadruped robot. , 2017, , .		6
57	Trajectory tracking control of a unicycle-type mobile robot with a new planning algorithm. , 2017, , .		6
58	Turning strategy analysis based on trot gait of a quadruped robot. , 2017, , .		7
59	Design of dual-spring shock absorption system for outdoor AGV. , 2017, , .		4
60	Vehicle 3-dimension measurement by monocular camera based on license plate. , 2016, , .		4
61	System design and control of a sail-based autonomous surface vehicle. , 2016, , .		4
62	A hybrid lidar-based indoor navigation system enhanced by ceiling visual codes for mobile robots. , 2016, , .		16
63	Heavy-Payload Omnidirectional Robot. , 2016, , .		1
64	The State of the Art in Grasping and Manipulation for Household Service. , 2015, , 341-356.		1
65	The State of the Art in Human-Robot Interaction for Household Services. , 2015, , 457-465.		1
66	Design of a fast charging system for service robots. , 2015, , .		0
67	The State of the Art in Service Robotic System Design. , 2015, , 19-34.		1
68	The State of the Art in Mapping and Navigation for Household Service. , 2015, , 117-128.		0
69	A geometric approach to stroke extraction for the Chinese calligraphy robot. , 2014, , .		16
70	Design and analysis of gripper with retractable spine for tree climbing robots. , 2014, , .		3
71	Controller-free ratio-variable gearbox for hybrid powertrain: Implementation and testing. , 2014, , .		0
72	A Finite Element Skeleton approach as the articulation insensitivity shape descriptor. , 2014, , .		0

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73	Robot learns Chinese calligraphy from Demonstrations. , 2014, , .		17
74	A real-time intelligent shoe system for writing by foot. , 2014, , .		1
75	Affection sensing in gait using intelligent shoe system. , 2014, , .		1
76	Longitudinal wheel-slip control for four wheel independent steering and drive vehicles. , 2014, , .		2
77	Controller-free ratio-variable gearbox for parallel hybrid powertrain. , 2014, , .		1
78	Novel Design of Gaits on Space Station for Dynamic Disturbance Minimization. IEEE/ASME Transactions on Mechatronics, 2014, 19, 1392-1403.	3.7	5
79	Video anomaly detection based on a hierarchical activity discovery within spatio-temporal contexts. Neurocomputing, 2014, 143, 144-152.	3.5	82
80	Dynamics modeling and analysis of a flexible-base space robot for capturing large flexible spacecraft. Multibody System Dynamics, 2014, 32, 357-401.	1.7	55
81	A novel exterior climbing robot design for space station. , 2013, , .		1
82	A novel Differential Modular Robot Joint — Design and implementation. , 2013, , .		6
83	A novel precise pick and place device for robotic manipulators. , 2013, , .		3
84	Identifying the singularity conditions of Canadarm2 based on elementary Jacobian transformation. , 2013, , .		3
85	Realtime 2D code based localization for indoor robot navigation. , 2013, , .		15
86	System and design of a compact and heavy-payload AGV system for flexible production line. , 2013, , .		0
87	Vehicle Safety Enhancement System: Sensing and Communication. International Journal of Distributed Sensor Networks, 2013, 9, 542891.	1.3	1
88	A finite element contour approach to affine invariant shape representation. , 2013, , .		0
89	Survey of mobility approaches for EVR application in space station. , 2013, , .		0
90	Design of the Linebot for power transmission lines inspection. , 2013, , .		6

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91	Optimization for rail-type climbing robot in space. , 2013, , .		2
92	A novel hand posture recognition system based on sparse representation using color and depth images. , 2013, , .		3
93	A novel design of Tri-star wheeled mobile robot for high obstacle climbing. , 2012, , .		9
94	A real-time intelligent shoe-keyboard for computer input. , 2012, , .		7
95	Collision avoidance of industrial robot arms using an invisible sensitive skin. , 2012, , .		19
96	The design of robot for space station operation. , 2012, , .		6
97	System and design of Clothbot: A robot for flexible clothes climbing. , 2012, , .		21
98	Real-time monocular visual self-localization approach using natural circular landmarks for indoor navigation. , 2012, , .		5
99	A real-time vehicle safety system. , 2012, , .		11
100	A Real-time intelligent shoe system for fall detection. , 2011, , .		11
101	Vehicle structure and Omni-directionality for higher space efficiency. , 2011, , .		0
102	A data gathering algorithm based on swarm intelligence and load balancing strategy for mobile sink. , 2011, , .		4
103	A new Cartesian cutting robot with laser height control system. , 2011, , .		2
104	On stability region analysis for a class of human learning controllers. , 2010, , .		1
105	Energy management for four-wheel independent driving vehicle. , 2010, , .		6
106	Robust State of Charge Estimation for Hybrid Electric Vehicles: Framework and Algorithms. Energies, 2010, 3, 1654-1672.	1.6	43
107	Fuzzy Control for Battery Equalization Based on State of Charge. , 2010, , .		40
108	Linear-time path and motion planning algorithm for a tree climbing robot — TreeBot. , 2010, , .		2

#	ARTICLE	IF	CITATIONS
109	Omnidirectional Steering Interface and Control for a Four-Wheel Independent Steering Vehicle. IEEE/ASME Transactions on Mechatronics, 2010, 15, 329-338.	3.7	58
110	Battery Fast Charging Strategy Based on Model Predictive Control. , 2010, , .		18
111	Performance analysis of routing protocols for vehicle safety communications on the freeway. , 2009, , .		4
112	Omni-directional steer-by-wire interface for four wheel independent steering vehicle. , 2009, , .		9
113	Support Vector Machine Based Approach for Abstracting Human Control Strategy in Controlling Dynamically Stable Robots. Journal of Intelligent and Robotic Systems: Theory and Applications, 2009, 55, 39-54.	2.0	18
114	Hybrid algorithm for segmentation and tracking in surveillance. , 2009, , .		5
115	Multi-objective parameters optimization of electric assist control strategy for parallel hybrid electric vehicle. , 2009, , .		5
116	System and design of an Omni-directional vehicle. , 2009, , .		20
117	Behavior-based steering control for four wheel independent steering vehicle. , 2009, , .		1
118	REAL-TIME SURVEILLANCE BASED ON HUMAN BEHAVIOR ANALYSIS. International Journal of Information Acquisition, 2005, 02, 353-365.	0.2	6
119	A detection system for human abnormal behavior. , 2005, , .		12
120	A real time race classification system. , 0, , .		6