

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	Video anomaly detection based on a hierarchical activity discovery within spatio-temporal contexts. Neurocomputing, 2014, 143, 144-152.	3.5	82
2	Omnidirectional Steering Interface and Control for a Four-Wheel Independent Steering Vehicle. IEEE/ASME Transactions on Mechatronics, 2010, 15, 329-338.	3.7	58
3	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
4	Cooperative Moving-Target Enclosing of Networked Vehicles With Constant Linear Velocities. IEEE Transactions on Cybernetics, 2020, 50, 798-809.	6.2	45
5	FreeBOT: A Freeform Modular Self-reconfigurable Robot with Arbitrary Connection Point - Design and Implementation. , 2020, , .		44
6	Robust State of Charge Estimation for Hybrid Electric Vehicles: Framework and Algorithms. Energies, 2010, 3, 1654-1672.	1.6	43
7	Fuzzy Control for Battery Equalization Based on State of Charge. , 2010, , .		40
8	AIR-Chem: Authentic Intelligent Robotics for Chemistry. Journal of Physical Chemistry A, 2018, 122, 9142-9148.	1.1	36
9	Geometry optimization of solar thermoelectric generator under different operating conditions via Taguchi method. Energy Conversion and Management, 2021, 238, 114158.	4.4	34
10	System and design of Clothbot: A robot for flexible clothes climbing. , 2012, , .		21
11	System and design of an Omni-directional vehicle. , 2009, , .		20
12	Collision avoidance of industrial robot arms using an invisible sensitive skin. , 2012, , .		19
13	A collaborative robot for COVID-19 oropharyngeal swabbing. Robotics and Autonomous Systems, 2022, 148, 103917.	3.0	19
14	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
15	Battery Fast Charging Strategy Based on Model Predictive Control. , 2010, , .		18
16	Robot learns Chinese calligraphy from Demonstrations. , 2014, , .		17
17	A geometric approach to stroke extraction for the Chinese calligraphy robot. , 2014, , .		16
18	A hybrid lidar-based indoor navigation system enhanced by ceiling visual codes for mobile robots. , 2016, , .		16

#	ARTICLE	IF	CITATIONS
19	Realtime 2D code based localization for indoor robot navigation. , 2013, , .		15
20	Hierarchical Reinforcement Learning Framework Towards Multi-Agent Navigation. , 2018, , .		15
21	Vehicle Pose and Shape Estimation Through Multiple Monocular Vision. , 2018, , .		14
22	CCRobot-III: a Split-type Wire-driven Cable Climbing Robot for Cable-stayed Bridge Inspection. , 2020, , .		13
23	A detection system for human abnormal behavior. , 2005, , .		12
24	A Real-time intelligent shoe system for fall detection. , 2011, , .		11
25	A real-time vehicle safety system. , 2012, , .		11
26	Omni-directional steer-by-wire interface for four wheel independent steering vehicle. , 2009, , .		9
27	A novel design of Tri-star wheeled mobile robot for high obstacle climbing. , 2012, , .		9
28	Robot-to-Robot Relative Pose Estimation based on Semidefinite Relaxation Optimization. , 2020, , .		9
29	OceanVoy: A Hybrid Energy Planning System for Autonomous Sailboat. , 2020, , .		9
30	Posture Correction of Quadruped Robot for Adaptive Slope Walking. , 2018, , .		8
31	A real-time intelligent shoe-keyboard for computer input. , 2012, , .		7
32	Turning strategy analysis based on trot gait of a quadruped robot. , 2017, , .		7
33	Tacking Control of an Autonomous Sailboat Based on Force Polar Diagram. , 2018, , .		7
34	Energy Optimization of Automatic Hybrid Sailboat. , 2018, , .		7
35	An Obstacle-crossing Strategy Based on the Fast Self-reconfiguration for Modular Sphere Robots. , 2020, , .		7
36	REAL-TIME SURVEILLANCE BASED ON HUMAN BEHAVIOR ANALYSIS. International Journal of Information Acquisition, 2005, 02, 353-365.	0.2	6

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37	A real time race classification system. , 0, , .		6
38	Energy management for four-wheel independent driving vehicle. , 2010, , .		6
39	The design of robot for space station operation. , 2012, , .		6
40	A novel Differential Modular Robot Joint — Design and implementation. , 2013, , .		6
41	Design of the Linebot for power transmission lines inspection. , 2013, , .		6
42	Gait design and comparison study of a quadruped robot. , 2017, , .		6
43	Trajectory tracking control of a unicycle-type mobile robot with a new planning algorithm. , 2017, , .		6
44	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
45	Toward Long-Term Sailing Robots: State of the Art From Energy Perspectives. Frontiers in Robotics and AI, 2021, 8, 787253.	2.0	6
46	Hybrid algorithm for segmentation and tracking in surveillance. , 2009, , .		5
47	Multi-objective parameters optimization of electric assist control strategy for parallel hybrid electric vehicle. , 2009, , .		5
48	Real-time monocular visual self-localization approach using natural circular landmarks for indoor navigation. , 2012, , .		5
49	Novel Design of Gaits on Space Station for Dynamic Disturbance Minimization. IEEE/ASME Transactions on Mechatronics, 2014, 19, 1392-1403.	3.7	5
50	Performance analysis of routing protocols for vehicle safety communications on the freeway. , 2009, , .		4
51	A data gathering algorithm based on swarm intelligence and load balancing strategy for mobile sink. , 2011, , .		4
52	Vehicle 3-dimension measurement by monocular camera based on license plate. , 2016, , .		4
53	System design and control of a sail-based autonomous surface vehicle. , 2016, , .		4
54	Design of dual-spring shock absorption system for outdoor AGV. , 2017, , .		4

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55	A novel precise pick and place device for robotic manipulators. , 2013, , .		3
56	Identifying the singularity conditions of Canadarm2 based on elementary Jacobian transformation. , 2013, , .		3
57	A novel hand posture recognition system based on sparse representation using color and depth images. , 2013, , .		3
58	Design and analysis of gripper with retractable spine for tree climbing robots. , 2014, , .		3
59	Design of a rescue robot with a wearable suit augmenting high payloads rescue missions. , 2017, , .		3
60	A vision-based perception framework for outdoor navigation tasks applicable to legged robots. , 2017, , .		3
61	Design and Control of A Hybrid Sailboat for Enhanced Tacking Maneuerv*. , 2018, , .		3
62	Learning and Generation of Personal Handwriting Style Chinese Font. , 2018, , .		3
63	Design and Optimization of a Wave Driven Solar Tracker for Floating Photovoltaic Plants. , 2019, , .		3
64	Obstacle Avoidance for Autonomous Sailboats via Reinforcement Learning with Coarse-to-fine Strategy. , 2019, , .		3
65	Wing Sail Land-yacht Modeling And System Verification. , 2019, , .		3
66	Collaborative Object Transportation by Multiple Robots with Onboard Object Localization Algorithm. , 2019, , .		3
67	Design and Energy Consumption Optimization of an Automatic Hybrid Sailboat. , 2021, , .		3
68	Collision Avoidance for Autonomous Sailboats Based on RRS Protocol. , 2019, , .		3
69	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
70	Design and Control of a Wave-Driven Solar Tracker. IEEE Transactions on Automation Science and Engineering, 2023, 20, 1007-1019.	3.4	3
71	Linear-time path and motion planning algorithm for a tree climbing robot — TreeBot. , 2010, , .		2
72	A new Cartesian cutting robot with laser height control system. , 2011, , .		2

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73	Optimization for rail-type climbing robot in space. , 2013, , .		2
74	Longitudinal wheel-slip control for four wheel independent steering and drive vehicles. , 2014, , .		2
75	Energy efficiency optimization of an interactive quadruped robot. , 2017, , .		2
76	A Music Generation Model for Robotic Composers. , 2018, , .		2
77	Vibration-Based Anemometer Design for Mini Autonomous Sailboat. , 2018, , .		2
78	An Adaptive Position Keeping Algorithm For Autonomous Sailboats. , 2019, , .		2
79	A Low-Cost, Wide-Range and Multi-Functional Vision Backend of Sailboat Research Testbed. , 2019, , .		2
80	A Novel Solar Tracker Driven by Waves: From Idea to Implementation. , 2020, , .		2
81	Design of a Battery Carrying Barge for Enhancing Autonomous Sailboat's Endurance Capacity. , 2021, , .		2
82	Collision Risk Assessment and Obstacle Avoidance Control for Autonomous Sailing Robots. , 2021, , .		2
83	An Efficient Parallel Self-assembly Planning Algorithm for Modular Robots in Environments with Obstacles. , 2021, , .		2
84	A Combined Planning Method Based on Biarc Curve and BÄzier Curve for Concentric Cable-Driven Manipulators Working in Confined Environments. IEEE/ASME Transactions on Mechatronics, 2022, 27, 4475-4486.	3.7	2
85	Design and Optimization of a Magnetic Catcher for UAV Landing on Disturbed Aquatic Surface Platforms. , 2022, , .		2
86	Behavior-based steering control for four wheel independent steering vehicle. , 2009, , .		1
87	On stability region analysis for a class of human learning controllers. , 2010, , .		1
88	A novel exterior climbing robot design for space station. , 2013, , .		1
89	Vehicle Safety Enhancement System: Sensing and Communication. International Journal of Distributed Sensor Networks, 2013, 9, 542891.	1.3	1
90	A real-time intelligent shoe system for writing by foot. , 2014, , .		1

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91	Affection sensing in gait using intelligent shoe system. , 2014, , .		1
92	Controller-free ratio-variable gearbox for parallel hybrid powertrain. , 2014, , .		1
93	The State of the Art in Grasping and Manipulation for Household Service. , 2015, , 341-356.		1
94	The State of the Art in Humanâ€“Robot Interaction for Household Services. , 2015, , 457-465.		1
95	The State of the Art in Service Robotic System Design. , 2015, , 19-34.		1
96	Heavy-Payload Omnidirectional Robot. , 2016, , .		1
97	Dual-spring AGV shock absorption system design: Dynamic analysis and simulations. , 2017, , .		1
98	Trajectory Tracking of Unicycle-type Robots with Constraints. , 2018, , .		1
99	Lidar-IMU Fusion for 2.5D Mapping. , 2018, , .		1
100	Design of An Adaptive Mini Gripper for Climbing Robots. , 2018, , .		1
101	A New Turbine-Sail Coupled Propulsive System for Autonomous Sailboats*. , 2019, , .		1
102	Improving The Robot Localization Accuracy Using Range-only Data: An Optimization Approach. , 2021, , .		1
103	A Two-stage Automatic Latching System for The USVs Charging in Disturbed Berth. , 2020, , .		1
104	A User-customized Automatic Music Composition System. , 2022, , .		1
105	Vehicle structure and Omni-directionality for higher space efficiency. , 2011, , .		0
106	System and design of a compact and heavy-payload AGV system for flexible production line. , 2013, , .		0
107	A finite element contour approach to affine invariant shape representation. , 2013, , .		0
108	Survey of mobility approaches for EVR application in space station. , 2013, , .		0

#	ARTICLE	IF	CITATIONS
109	Controller-free ratio-variable gearbox for hybrid powertrain: Implementation and testing. , 2014, , .		0
110	A Finite Element Skeleton approach as the articulation insensitivity shape descriptor. , 2014, , .		0
111	Design of a fast charging system for service robots. , 2015, , .		0
112	Jukepix: A Cross-Modality Approach to Transform Paintings into Music Segments. , 2018, , .		0
113	Trajectory Tracking for Leader-Follower Vehicle System with Velocity Constraints. , 2018, , .		0
114	Towards Long Duration Self-Sustainable Ocean Sampling System*. , 2019, , .		0
115	SongBot: An Interactive Music Generation Robotic System for Non-musicians Learning from A Song. , 2021, , .		0
116	Computational Efficient Simulation of Kelvin Wake for Unmanned Surface Vehicles. , 2021, , .		0
117	Modeling and Implementation of Tacking for Wing Sail Land-Yacht. , 2021, , .		0
118	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
119	The State of the Art in Mapping and Navigation for Household Service. , 2015, , 117-128.		0
120	A Predictive Control Method for Stabilizing a Manipulator-based UAV Landing Platform on Fluctuating Marine Surface*. , 2021, , .		0