Lining Sun

List of Publications by Year
in descending order

78 papers	733 citations	759233 12 h-index	752698 20 g-index
78 all docs	78 docs citations	78 times ranked	727 citing authors

#	Article	IF	Citations
1	Combined Use of FSR Sensor Array and SVM Classifier for Finger Motion Recognition Based on Pressure Distribution Map. Journal of Bionic Engineering, 2012, 9, 39-47.	5.0	95
2	The Mechanical Design and Experiments of HIT/DLR Prosthetic Hand. , 2006, , .		43
3	Levenberg-Marquardt Based Neural Network Control for a Five-fingered Prosthetic Hand. , 0, , .		37
4	Towards Online Estimation of Human Joint Muscular Torque with a Lower Limb Exoskeleton Robot. Applied Sciences (Switzerland), 2018, 8, 1610.	2.5	36
5	EMG Control for a Five-fingered Underactuated Prosthetic Hand Based on Wavelet Transform and Sample Entropy. , 2006, , .		35
6	Structure design of active power-assist lower limb exoskeleton APAL robot. Advances in Mechanical Engineering, 2017, 9, 168781401773579.	1.6	35
7	A Five-fingered Underactuated Prosthetic Hand System. , 2006, , .		30
8	A Five-fingered Underactuated Prosthetic Hand Control Scheme. , 0, , .		27
9	Design of a 6-DOF upper limb rehabilitation exoskeleton with parallel actuated joints. Bio-Medical Materials and Engineering, 2014, 24, 2527-2535.	0.6	26
10	EMG Control for a Five-fingered Prosthetic Hand Based on Wavelet Transform and Autoregressive Model. , 2006, , .		22
11	Automatic Generation of Locomotion Patterns for Soft Modular Reconfigurable Robots. Applied Sciences (Switzerland), 2020, 10, 294.	2.5	22
12	Flight Dynamics Modeling and Control of a Novel Catapult Launched Tandem-Wing Micro Aerial Vehicle With Variable Sweep. IEEE Access, 2018, 6, 42294-42308.	4.2	19
13	A parallel actuated pantograph leg for high-speed locomotion. Journal of Bionic Engineering, 2017, 14, 202-217.	5.0	18
14	Approximate perturbation stance map of the slip runner and application to locomotion control. Journal of Bionic Engineering, 2012, 9, 411-422.	5.0	17
15	Aerodynamic characteristics of a novel catapult launched morphing tandem-wing unmanned aerial vehicle. Advances in Mechanical Engineering, 2017, 9, 168781401769229.	1.6	17
16	A free gait controller designed for a heavy load hexapod robot. Advances in Mechanical Engineering, 2019, 11, 168781401983836.	1.6	15
17	A Vision-Based Two-Stage Framework for Inferring Physical Properties of the Terrain. Applied Sciences (Switzerland), 2020, 10, 6473.	2.5	14
18	Dynamic Parameter Identification of a Lower Extremity Exoskeleton Using RLS-PSO. Applied Sciences (Switzerland), 2019, 9, 324.	2.5	13

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19	Generation of closed-form inverse kinematics for reconfigurable robots. Frontiers of Mechanical Engineering in China, 2008, 3, 91-96.	0.4	12
20	The Exoskeleton Balance Assistance Control Strategy Based on Single Step Balance Assessment. Applied Sciences (Switzerland), 2019, 9, 884.	2.5	12
21	A Strong Tracking Mixed-Degree Cubature Kalman Filter Method and Its Application in a Quadruped Robot. Sensors, 2020, 20, 2251.	3.8	12
22	A Novel EMG Motion Pattern Classifier Based on Wavelet Transform and Nonlinearity Analysis Method. , 2006, , .		10
23	Passive Acoustic Source Localization at a Low Sampling Rate Based on a Five-Element Cross Microphone Array. Sensors, 2015, 15, 13326-13347.	3.8	10
24	Design of a prototype of an adaptive soft robot based on ferrofluid. , 2015, , .		8
25	A miniature surface tension-driven robot mimicking the water-surface locomotion of water strider. , 2015, , .		8
26	Design and analysis of a whole-body controller for a velocity controlled robot mobile manipulator. Science China Information Sciences, 2020, 63, 1.	4.3	8
27	Research of a novel miniature tactile sensor for five-finger dexterous robot hand. , 2010, , .		7
28	A Novel Hybrid Safety-Control Strategy for a Manipulator. International Journal of Advanced Robotic Systems, 2014, 11, 58.	2.1	7
29	Bio-Inspired Equilibrium Point Control Scheme for Quadrupedal Locomotion. IEEE Transactions on Cognitive and Developmental Systems, 2019, 11, 200-209.	3.8	6
30	Learning Articulated Constraints From a One-Shot Demonstration for Robot Manipulation Planning. IEEE Access, 2019, 7, 172584-172596.	4.2	6
31	A Framework for Human-Robot-Human Physical Interaction Based on N-Player Game Theory. Sensors, 2020, 20, 5005.	3.8	6
32	Task-oriented Hierarchical Control of Modular Soft Robots with External Vision Guidance. Journal of Bionic Engineering, 2022, 19, 657-667.	5.0	6
33	Teleoperation System of Internet-Based Multi-Operator Multi-Mobile-Manipulator. , 2010, , .		5
34	A CPG-based locomotion control architecture for hexapod robot. , 2013, , .		5
35	Robot Motion Planning Method Based on Incremental High-Dimensional Mixture Probabilistic Model. Complexity, 2018, 2018, 1-14.	1.6	5
36	Learning the Metric of Task Constraint Manifolds for Constrained Motion Planning. Electronics (Switzerland), 2018, 7, 395.	3.1	5

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37	Semantic 3D Reconstruction for Robotic Manipulators with an Eye-In-Hand Vision System. Applied Sciences (Switzerland), 2020, 10, 1183.	2.5	5
38	Exoskeleton Active Walking Assistance Control Framework Based on Frequency Adaptive Dynamics Movement Primitives. Frontiers in Neurorobotics, 2021, 15, 672582.	2.8	5
39	Creating Better Collision-Free Trajectory for Robot Motion Planning by Linearly Constrained Quadratic Programming. Frontiers in Neurorobotics, 2021, 15, 724116.	2.8	5
40	Autonomous planning and control strategy for space manipulators with dynamics uncertainty based on learning from demonstrations. Science China Technological Sciences, 2021, 64, 2662-2675.	4.0	5
41	Application of cycle variable pitch propeller to morphing unmanned aerial vehicles. , 2015, , .		4
42	Deep Reinforcement Learning Algorithm for Object Placement Tasks with Manipulator. , 2018, , .		4
43	A Unified Active Assistance Control Framework of Hip Exoskeleton for Walking and Balance Assistance. , 2019, , .		4
44	Attitude Trajectory Optimization to Ensure Balance Hexapod Locomotion. Sensors, 2020, 20, 6295.	3.8	4
45	Stance control of the SLIP hopper with adjustable stiffness of leg spring. , 2012, , .		3
46	Control of a biped walking with dynamic balance. , 2012, , .		3
47	Design of a novel frog-inspired hopping leg. , 2012, , .		3
48	Indirect adaptive impedance control for dual-arm cooperative manipulation. , 2017, , .		3
49	Design and Analysis of a Semi-circular Flexible Hexapod Robot MiniRHex. , 2018, , .		3
50	Force Control Method for Pantograph Leg of Large-scale Heavy-duty Legged Robot. , 2018, , .		3
51	Spatial Topological Relation Analysis for Cluttered Scenes. Sensors, 2020, 20, 7181.	3.8	3
52	Method of Robot Episode Cognition Based on Hippocampus Mechanism. IEEE Access, 2022, 10, 42386-42395.	4.2	3
53	A high performance FPGA-based joint controller with hardware/software co-design method. , 2012, , .		2
54	Stability analysis of quasi-periodic hopping of a passive one-legged robot with compliant hip joint. , 2014, , .		2

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55	Robust and fast mapping based on direct methods. , 2017, , .		2
56	A Multiplicative Noises and Additive Correlated Noises Cubature Kalman Filter and Its Application in Quadruped Robot. IEEE Access, 2020, 8, 162290-162301.	4.2	2
57	Dynamic Visual SLAM Based on Semantic Information and Multi-View Geometry. , 2020, , .		2
58	Control Method for The Balance Recovery of Indirect Tight Coordination Task Based on Force Sensor. , 2018, , .		1
59	A Novel Single Step Balance Assessment Method Based on Swing Foot Chasing Capture Point. , 2018, , .		1
60	Stable Motion Control Scheme Based on Foot-Force Distribution for a Large-Scale Hexapod Robot. , 2019, , .		1
61	Finite Class Bayesian Inference System for Circle and Linear Walking Gait Event Recognition Using Inertial Measurement Units. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 2869-2879.	4.9	1
62	Simulation Research on Reconfiguration Locomotion Planning for a 3-D Self-reconfigurable Robot. , 2006, , .		0
63	Research of Trajectory Tracking Control of Two-Wheeled Self-Balance Robot. , 2006, , .		0
64	Research on a CPG Bionic Control System of Robot. , 2007, , .		0
65	An improved algorithm of measuring extravehicular mobility unit (EMU) spacesuit joint damping parameters for the old passive robot system. , 2008, , .		0
66	Research on a central pattern generator bionic coupling control system of robot. , 2010, , .		0
67	Analytical inverse kinematic computation for anthropomorphic manipulator based on human-like motion optimization and maximum reachable region optimization. , 2014, , .		0
68	A fast filtering algorithm using the transmission mechanism of human auditory information and its application on quadruped robot speed tracking. , 2014, , .		0
69	Motion control for a single-legged robot. , 2016, , .		0
70	The Analysis of Alternating SLIP Model on Spinal Quadruped Robot in Bounding Gait. , 2018, , .		0
71	Stair-Climbing Auxiliary Device With Self-Adaption. , 2018, , .		0
72	Research on Dynamic Stability Prediction of Large Heavy Six-legged Robots On Slope. , 2018, , .		0

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73	A neural network growing algorithm based on Brownian movement and gravity constraint. Advances in Mechanical Engineering, 2018, 10, 168781401877492.	1.6	0
74	ONLINE ACTIVE ENSEMBLE LEARNING FOR ROBOT COLLISION DETECTION IN DYNAMIC ENVIRONMENTS. Journal of Mechanics in Medicine and Biology, 2021, 21, 2150035.	0.7	0
75	Design and motion performance of new inspection robot for Steam Generator heat transfer tubes. , 2021, , .		0
76	Pattern Analysis and Parameters Optimization of Dynamic Movement Primitives for Learning Unknown Trajectories. , 2020, , .		0
77	Teleoperation of the Tiangong-2 Space Manipulator System. , 2021, , .		0
78	A Rehabilitation Training Interactive Method for Lower Limb Exoskeleton Robot. Mathematical Problems in Engineering, 2022, 2022, 1-15.	1.1	0