Hong Cheng

List of Publications by Year
in descending order

79 papers	1,144 citations	567281 15 h-index
80 all docs	80 docs citations	80 times ranked

501196 28 g-index
1246 citing authors

#	Article	IF	Citations
1	Haptic Identification by ELM-Controlled Uncertain Manipulator. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 2398-2409.	9.3	137
2	Interactive body part contrast mining for human interaction recognition. , 2014, , .		95
3	Survey on Artificial Intelligence for Vehicles. Automotive Innovation, 2018, 1, 2-14.	5.1	73
4	Learning Physical Human–Robot Interaction With Coupled Cooperative Primitives for a Lower Exoskeleton. IEEE Transactions on Automation Science and Engineering, 2019, 16, 1566-1574.	5.2	65
5	Deep Background Modeling Using Fully Convolutional Network. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 254-262.	8.0	59
6	Simultaneously Encoding Movement and sEMG-Based Stiffness for Robotic Skill Learning. IEEE Transactions on Industrial Informatics, 2021, 17, 1244-1252.	11.3	59
7	Evaluation of a Fuzzy-Based Impedance Control Strategy on a Powered Lower Exoskeleton. International Journal of Social Robotics, 2016, 8, 103-123.	4.6	39
8	Hierarchical Interactive Learning for a HUman-Powered Augmentation Lower EXoskeleton. , 2016, , .		36
9	Sparsity-Induced Similarity Measure and Its Applications. IEEE Transactions on Circuits and Systems for Video Technology, 2016, 26, 613-626.	8.3	36
10	Object-Aware Dense Semantic Correspondence. , 2017, , .		31
11	Maximum Correntropy Criterion-Based Sparse Subspace Learning for Unsupervised Feature Selection. IEEE Transactions on Circuits and Systems for Video Technology, 2019, 29, 404-417.	8.3	29
12	Neural Learning Enhanced Variable Admittance Control for Human–Robot Collaboration. IEEE Access, 2020, 8, 25727-25737.	4.2	29
13	Dynamic Balance Gait for Walking Assistance Exoskeleton. Applied Bionics and Biomechanics, 2018, 2018, 1-10.	1.1	26
14	The safety and feasibility of a new rehabilitation robotic exoskeleton for assisting individuals with lower extremity motor complete lesions following spinal cord injury (SCI): an observational study. Spinal Cord, 2020, 58, 787-794.	1.9	26
15	Optimisation of Reference Gait Trajectory of a Lower Limb Exoskeleton. International Journal of Social Robotics, 2016, 8, 223-235.	4.6	25
16	Minimizing Human-Exoskeleton Interaction Force Using Compensation for Dynamic Uncertainty Error with Adaptive RBF Network. Journal of Intelligent and Robotic Systems: Theory and Applications, 2016, 82, 413-433.	3.4	25
17	The relationship between physical human-exoskeleton interaction and dynamic factors: using a learning approach for control applications. Science China Information Sciences, 2014, 57, 1-13.	4.3	24
18	Pixel-to-Model Distance for Robust Background Reconstruction. IEEE Transactions on Circuits and Systems for Video Technology, 2016, 26, 903-916.	8.3	24

#	Article	IF	Citations
19	End-to-End Driving Model for Steering Control of Autonomous Vehicles with Future Spatiotemporal Features. , 2019, , .		24
20	Data-Driven Reinforcement Learning for Walking Assistance Control of a Lower Limb Exoskeleton with Hemiplegic Patients. , 2020, , .		20
21	Fuzzy-based impedance regulation for control of the coupled human-exoskeleton system. , 2014, , .		19
22	Learning-based Walking Assistance Control Strategy for a Lower Limb Exoskeleton with Hemiplegia Patients. , 2018, , .		16
23	Design and Performance Evaluation of a Wearable Sensing System for Lower-Limb Exoskeleton. Applied Bionics and Biomechanics, 2018, 2018, 1-9.	1.1	14
24	Region-of-Interest based sparse feature learning method for Alzheimer's disease identification. Computer Methods and Programs in Biomedicine, 2020, 187, 105290.	4.7	13
25	Discriminative sparse subspace learning and its application to unsupervised feature selection. ISA Transactions, 2016, 61, 104-118.	5.7	12
26	Memristive Neural Networks: A Neuromorphic Paradigm for Extreme Learning Machine. IEEE Transactions on Emerging Topics in Computational Intelligence, 2019, 3, 15-23.	4.9	12
27	Data-Driven Optimal Assistance Control of a Lower Limb Exoskeleton for Hemiplegic Patients. Frontiers in Neurorobotics, 2020, 14, 37.	2.8	11
28	Learning Cooperative Primitives with physical Human-Robot Interaction for a HUman-powered Lower EXoskeleton. , 2016, , .		10
29	Compliant training control of ankle joint by exoskeleton with human EMG-torque interface. Assembly Automation, 2017, 37, 349-355.	1.7	10
30	c 2 AIDER : cognitive cloud exoskeleton system and its applications. Cognitive Computation and Systems, 2019, 1, 33-39.	1.4	9
31	Stair-ascent strategies and performance evaluation for a lower limb exoskeleton. International Journal of Intelligent Robotics and Applications, 2020, 4, 278-293.	2.8	9
32	Pedestrian Detection and Behavior Recognition Based on Vision. , 2019, , .		8
33	Real-Time Cloud Visual Simultaneous Localization and Mapping for Indoor Service Robots. IEEE Access, 2020, 8, 16816-16829.	4.2	8
34	On-line Walking Speed Control in Human-Powered Exoskeleton Systems Based on Dual Reaction Force Sensors. Journal of Intelligent and Robotic Systems: Theory and Applications, 2017, 87, 59-80.	3.4	7
35	Model-based Control with Interaction Predicting for Human-coupled Lower Exoskeleton Systems. Journal of Intelligent and Robotic Systems: Theory and Applications, 2020, 100, 389-400.	3.4	7
36	Learning Gait Models With Varying Walking Speeds. IEEE Robotics and Automation Letters, 2021, 6, 183-190.	5.1	7

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37	Multimodal Human-Exoskeleton Interface for Lower Limb Movement Prediction Through a Dense Co-Attention Symmetric Mechanism. Frontiers in Neuroscience, 2022, 16, 796290.	2.8	7
38	Design of a wearable sensing system for a lower extremity exoskeleton. , 2017, , .		6
39	Hand gesture based control strategy for mobile robots. , 2017, , .		6
40	Adaptive Gait Planning for Walking Assistance Lower Limb Exoskeletons in Slope Scenarios. , 2019, , .		5
41	Pyramid Bayesian Method for Model Uncertainty Evaluation of Semantic Segmentation in Autonomous Driving. Automotive Innovation, 2022, 5, 70-78.	5.1	5
42	General Recurrent Neural Network for Solving Generalized Linear Matrix Equation. Complexity, 2017, 2017, 1-7.	1.6	4
43	Gait Planning with Dynamic Movement Primitives for Lower Limb Exoskeleton Walking Up Stairs. , 2018, , .		4
44	Learning Coupled Parameters with Continuous Domains for Human-powered Lower Exoskeleton. , 2018, , .		4
45	Hybrid Control for Human-Powered Augmentation Exoskeleton. , 2018, , .		4
46	Standing balance maintenance by virtual suspension model control for legged robot. Advances in Mechanical Engineering, 2020, 12, 168781402095497.	1.6	4
47	Learning Quintuplet Loss for Large-Scale Visual Geolocalization. IEEE MultiMedia, 2020, 27, 34-43.	1.7	3
48	A Novel Balance Control Strategy Based on Enhanced Stability Pyramid Index and Dynamic Movement Primitives for a Lower Limb Human-Exoskeleton System. Frontiers in Neurorobotics, 2021, 15, 751642.	2.8	3
49	Estimating 6D Object Poses with Temporal Motion Reasoning for Robot Grasping in Cluttered Scenes. IEEE Robotics and Automation Letters, 2024, , 1-1.	5.1	3
50	Adaptive Event-Triggered Motion Tracking Control Strategy for a Lower Limb Rehabilitation Exoskeleton. , 2021, , .		3
51	Intention recgonition for exoskeleton. , 2017, , .		2
52	Enhancing subspace clustering based on dynamic prediction. Frontiers of Computer Science, 2019, 13, 802-812.	2.4	2
53	Learning continuous coupled multi-controller coefficients based on actor-critic algorithm for lower-limb exoskeleton. Science China Information Sciences, 2021, 64, 1.	4.3	2
54	Adaptive compensation for time-varying uncertainties in model-based control of lower-limb exoskeleton systems. Science China Information Sciences, 2021, 64, 1.	4.3	2

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55	Robust Scene Parsing by Mining Supportive Knowledge From Dataset. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 2633-2646.	11.3	2
56	Bayesian view synthesis for video stitching. , 2016, , .		1
57	Muscle synergy analysis of a set of lower extremity movements in quiet standing scenario: A preliminary study. , 2016, , .		1
58	Time-varying stiffness tracking control of knee exoskeleton. , 2017, , .		1
59	Robust spatial–temporal Bayesian view synthesis for video stitching with occlusion handling. Machine Vision and Applications, 2018, 29, 219-232.	2.7	1
60	Learning Jumping Skills From Human with a Fast Reinforcement Learning Framework. , 2018, , .		1
61	EFRNet: Efficient Feature Reconstructing Network for Real-Time Scene Parsing. IEEE Transactions on Multimedia, 2022, 24, 2852-2865.	7.2	1
62	Estimating the Center of Mass of Human-Exoskeleton Systems with Physically Coupled Serial Chain. , 2021, , .		1
63	TemporalFusion: Temporal Motion Reasoning with Multi-Frame Fusion for 6D Object Pose Estimation. , 2021, , .		1
64	Synergetic Gait Prediction for Stroke Rehabilitation with Varying Walking Speeds. , 2021, , .		1
65	Editorial: Neural Interface for Cognitive Human-Robot Interaction and Collaboration. Frontiers in Neuroscience, 2022, 16, 830877.	2.8	1
66	Knee Trajectory Modulation for Impact Reducing of Lower Limb Exoskeletons. , 2021, , .		1
67	A Novel Multimodal Human-Exoskeleton Interface Based on EEG and sEMG Activity for Rehabilitation Training. , 2022, , .		1
68	Optimized trajectory recovery of on-road vehicles from monocular videos with multiple constraints. IEEJ Transactions on Electrical and Electronic Engineering, 2014, 9, 200-206.	1.4	0
69	Quadratic modeling of wheeled moving platforms on planes. IEEJ Transactions on Electrical and Electronic Engineering, 2016, 11, 192-197.	1.4	0
70	Unsupervised feature selection by nonnegative sparsity adaptive subspace learning. , 2016, , .		0
71	Multi-subgraph matching for logo localization using genetic algorithm. , 2016, , .		0
72	An Approximate Quadratic Programming for Efficient Bellman Equation Solution. IEEE Access, 2019, 7, 126077-126087.	4.2	0

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73	The AIDER system and its clinical applications. Science China Information Sciences, 2021, 64, 1.	4.3	0
74	Exoskeleton cloud-brain platform and its application in safety assessment. Assembly Automation, 2021, ahead-of-print, .	1.7	0
75	ESPI: Dynamic Safety Evaluation Index for Human-Exoskeleton System. , 2021, , .		0
76	Keep Safe: A Novel Static Balance Control Strategy for Lower Limb Exoskeletons. , 2020, , .		0
77	Collision Reduction Walking for Lower Limb Exoskeletons. International Journal of Humanoid Robotics, 0, , .	1.1	0
78	Weak6D: Weakly Supervised 6D Pose Estimation With Iterative Annotation Resolver. IEEE Robotics and Automation Letters, 2023, 8, 1463-1470.	5.1	0
79	Autonomous Driving-Oriented Cognitive Map Lane Generation and Location Recognition Algorithm. , 2022, , .		0