Qingsong Ai

List of Publications by Year in descending order

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82	1,464	19	36
papers	citations	h-index	g-index
83	83	83	1493
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Recent development of mechanisms and control strategies for robot-assisted lower limb rehabilitation. Mechatronics, 2015, 31, 132-145.	3.3	351
2	Robust Iterative Feedback Tuning Control of a Compliant Rehabilitation Robot for Repetitive Ankle Training. IEEE/ASME Transactions on Mechatronics, 2017, 22, 173-184.	5.8	96
3	High-Order Model-Free Adaptive Iterative Learning Control of Pneumatic Artificial Muscle With Enhanced Convergence. IEEE Transactions on Industrial Electronics, 2020, 67, 9548-9559.	7.9	84
4	Feature extraction of four-class motor imagery EEG signals based on functional brain network. Journal of Neural Engineering, 2019, 16, 026032.	3.5	68
5	Feature Selection for Motor Imagery EEG Classification Based on Firefly Algorithm and Learning Automata. Sensors, 2017, 17, 2576.	3.8	57
6	Intelligent monitoring and diagnosis for modern mechanical equipment based on the integration of embedded technology and FBGS technology. Measurement: Journal of the International Measurement Confederation, 2011, 44, 1499-1511.	5.0	45
7	A new digital watermarking scheme for 3D triangular mesh models. Signal Processing, 2009, 89, 2159-2170.	3.7	39
8	Research on Lower Limb Motion Recognition Based on Fusion of sEMG and Accelerometer Signals. Symmetry, 2017, 9, 147.	2.2	37
9	Joint offloading decision and resource allocation for mobile edge computing enabled networks. Computer Communications, 2020, 154, 361-369.	5.1	35
10	Active interaction control applied to a lower limb rehabilitation robot by using EMG recognition and impedance model. Industrial Robot, 2014, 41, 465-479.	2.1	32
11	A Subject-Specific EMG-Driven Musculoskeletal Model for Applications in Lower-Limb Rehabilitation Robotics. International Journal of Humanoid Robotics, 2016, 13, 1650005.	1.1	29
12	Disturbance-Estimated Adaptive Backstepping Sliding Mode Control of a Pneumatic Muscles-Driven Ankle Rehabilitation Robot. Sensors, 2018, 18, 66.	3.8	29
13	Joint Offloading and Charge Cost Minimization in Mobile Edge Computing. IEEE Open Journal of the Communications Society, 2020, 1, 205-216.	6.9	29
14	An analytical approach to customer requirement information processing. Enterprise Information Systems, 2013, 7, 543-557.	4.7	27
15	Hierarchical Compliance Control of a Soft Ankle Rehabilitation Robot Actuated by Pneumatic Muscles. Frontiers in Neurorobotics, 2017, 11, 64.	2.8	25
16	Wireless Body Area Network Mobility-Aware Task Offloading Scheme. IEEE Access, 2018, 6, 61366-61376.	4.2	25
17	Machine Learning in Robot-Assisted Upper Limb Rehabilitation: A Focused Review. IEEE Transactions on Cognitive and Developmental Systems, 2023, 15, 2053-2063.	3.8	23
18	Bioinspired Stretchable Fiber-Based Sensor toward Intelligent Human–Machine Interactions. ACS Applied Materials & Diterfaces, 2022, 14, 22666-22677.	8.0	22

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19	Fuzzy Sliding Mode Control of a Multi-DOF Parallel Robot in Rehabilitation Environment. International Journal of Humanoid Robotics, 2014, 11, 1450004.	1.1	20
20	An EMG-based force prediction and control approach for robot-assisted lower limb rehabilitation. , 2014, , .		19
21	Efficient caching strategy in contentâ€centric networking for vehicular <i>adâ€hoc</i> network applications. IET Intelligent Transport Systems, 2018, 12, 703-711.	3.0	19
22	Mutual-Information-Based Incremental Relaying Communications for Wireless Biomedical Implant Systems. Sensors, 2018, 18, 515.	3.8	19
23	Research on Channel Selection and Multi-Feature Fusion of EEG Signals for Mental Fatigue Detection. Entropy, 2021, 23, 457.	2.2	17
24	An Intelligent Computation Demand Response Framework for IIoT-MEC Interactive Networks. IEEE Networking Letters, 2020, 2, 154-158.	1.9	16
25	Hammerstein model for hysteresis characteristics of pneumatic muscle actuators. International Journal of Intelligent Robotics and Applications, 2019, 3, 33-44.	2.8	15
26	Design and Hierarchical Force-Position Control of Redundant Pneumatic Muscles-Cable-Driven Ankle Rehabilitation Robot. IEEE Robotics and Automation Letters, 2022, 7, 502-509.	5.1	15
27	Joint Optimization of USVs Communication and Computation Resource in IRS-Aided Wireless Inland Ship MEC Networks. IEEE Transactions on Green Communications and Networking, 2022, 6, 1023-1036.	5.5	15
28	Gestures recognition based on wavelet and LLE. Australasian Physical and Engineering Sciences in Medicine, 2013, 36, 167-176.	1.3	13
29	An Attention-Based CNN-LSTM Model with Limb Synergy for Joint Angles Prediction. , 2021, , .		13
30	sEMG-Based Dynamic Muscle Fatigue Classification Using SVM With Improved Whale Optimization Algorithm. IEEE Internet of Things Journal, 2021, 8, 16835-16844.	8.7	13
31	Lineâ€laserâ€based visual measurement for pavement 3D rut depth in driving state. Electronics Letters, 2018, 54, 1172-1174.	1.0	12
32	A new IMMU-based data glove for hand motion capture with optimized sensor layout. International Journal of Intelligent Robotics and Applications, 2019, 3, 19-32.	2.8	12
33	Bio-Inspired Design and Iterative Feedback Tuning Control of a Wearable Ankle Rehabilitation Robot. Journal of Computing and Information Science in Engineering, 2016, 16, .	2.7	11
34	Compliance adaptation of an intrinsically soft ankle rehabilitation robot driven by pneumatic muscles. , 2017 , , .		10
35	Frontal EEG Temporal and Spectral Dynamics Similarity Analysis between Propofol and Desflurane Induced Anesthesia Using Hilbert-Huang Transform. BioMed Research International, 2018, 2018, 1-16.	1.9	10
36	A method for determining customer requirement weights based on TFMF and TLR. Enterprise Information Systems, 2013, 7, 569-580.	4.7	9

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37	An efficient inâ€network caching decision algorithm for <scp>I</scp> nternet of things. International Journal of Communication Systems, 2018, 31, e3521.	2.5	9
38	Iterative Feedback Tuning-based Model-Free Adaptive Iterative Learning Control of Pneumatic Artificial Muscle. , $2019, , .$		9
39	Vertical Handover Algorithm for WBANs in Ubiquitous Healthcare with Quality of Service Guarantees. Information (Switzerland), 2017, 8, 34.	2.9	7
40	Design and Control of a Reconfigurable Upper Limb Rehabilitation Exoskeleton With Soft Modular Joints. IEEE Access, 2021, 9, 166815-166824.	4.2	7
41	Path Control of a Rehabilitation Robot Using Virtual Tunnel and Adaptive Impedance Controller. , 2014, , .		6
42	A MUSIC-based method for SSVEP signal processing. Australasian Physical and Engineering Sciences in Medicine, 2016, 39, 71-84.	1.3	6
43	Implementing Multi-DOF Trajectory Tracking Control System for Robotic Arm Experimental Platform. , 2018, , .		6
44	Rehabilitation assessment for lower limb disability based on multi-disciplinary approaches. Australasian Physical and Engineering Sciences in Medicine, 2014, 37, 355-365.	1.3	5
45	Optimally Probing Channel in Opportunistic Spectrum Access. IEEE Communications Letters, 2018, 22, 1426-1429.	4.1	5
46	Multiâ€radio channel rendezvous in cognitive radio networks. IET Communications, 2019, 13, 1433-1442.	2.2	5
47	Coupling Disturbance Compensated MIMO Control of Parallel Ankle Rehabilitation Robot Actuated by Pneumatic Muscles. , 2019, , .		5
48	Reversible Data Hiding Based on Structural Similarity Block Selection. IEEE Access, 2020, 8, 20375-20385.	4.2	5
49	Impedance Control of the Rehabilitation Robot Based on Sliding Mode Control. , 2016, , .		4
50	Fuzzy PD-Type Iterative Learning Control of a Single Pneumatic Muscle Actuator. Lecture Notes in Computer Science, 2017, , 812-822.	1.3	4
51	Design and implementation of haptic sensing interface for ankle rehabilitation robotic platform. , 2018, , .		4
52	Caching-Aided Task Offloading Scheme for Wireless Body Area Networks with MEC., 2019,,.		4
53	An Optimal Motion Planning Method of 7-DOF Robotic Arm for Upper Limb Movement Assistance. , 2019, , .		4
54	Online detection of class-imbalanced error-related potentials evoked by motor imagery. Journal of Neural Engineering, 2021, 18, 046032.	3.5	4

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55	Path Planning and Impedance Control of a Soft Modular Exoskeleton for Coordinated Upper Limb Rehabilitation. Frontiers in Neurorobotics, 2021, 15, 745531.	2.8	4
56	A STEPâ€based Generic Product Modeling Architecture for collaborative injection moulding product development. Human Factors and Ergonomics in Manufacturing, 2010, 20, 547-566.	2.7	3
57	Research on rehabilitation assessment methods based on human gait and sEMG. Cogent Engineering, 2016, 3, 1220113.	2.2	3
58	A Novel Task Offloading Framework to Support Wireless Body Area Networks with MEC., 2019,,.		3
59	Design and Modelling of a Compliant Ankle Rehabilitation Robot Redundantly Driven by Pneumatic Muscles. , 2019, , .		3
60	MISO Model Free Adaptive Control of Single Joint Rehabilitation Robot Driven by Pneumatic Artificial Muscles., 2020,,.		3
61	CNN-Based Hand Grasping Prediction and Control via Postural Synergy Basis Extraction. Sensors, 2022, 22, 831.	3.8	3
62	Joint Task Offloading and Resource Allocation for MEC Networks Considering UAV Trajectory. , 2021, , .		3
63	Event-Triggered Adaptive Hybrid Torque-Position Control (ET-AHTPC) for Robot-Assisted Ankle Rehabilitation. IEEE Transactions on Industrial Electronics, 2023, 70, 4993-5003.	7.9	3
64	A selective authentication watermarking algorithm for 2D CAD engineering drawings based on entity localization. , 2014, , .		2
65	A New Heuristic Scheduling Strategy LBMM in Cloud Computing. , 2016, , .		2
66	An improved CNN model based on fused time-frequency features for mental fatigue detection in BCIs. , $2021, , .$		2
67	An intelligent monitoring system for hydraulic pipes based on multiple sensors. , 2017, , .		1
68	Estimation of Wrist Joint Moment by Fusing Musculoskeletal Model and Muscle Synergy for Neuromuscular Interface. , 2018, , .		1
69	Cooperative Control of An Ankle Rehabilitation Robot Based on Human Intention., 2018,,.		1
70	sEMG-Based Motion Recognition. , 2018, , 67-104.		1
71	Wireless Big Data Meets WBANs: An Attempt for Cooperative Task Process Assisted with MEC. , 2019, , .		1
72	Brain-robot Shared Control Based on Motor Imagery and Improved Bayes Filter*., 2019,,.		1

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73	Neural Network Adaptive Control of Hand Rehabilitation Robot Driven by Flexible Pneumatic Muscles. , 2021, , .		1
74	Quantitative evaluation of hand functions using a wearable glove with multiple sensors. , 2021, , .		1
75	Graphene-based Motion Angle and Pressure Sensors for Lightweight and Flexible Wearable Devices. , 2021, , .		1
76	Control of multiple DOFs robots using motor imagery EEG combined with Huffman coding., 2021,,.		1
77	Multi-objective Trajectory Optimization of Redundant Manipulator for Patient Assistance. , 2021, , .		1
78	Storage-Repair Tradeoff for Hierarchical Distributed Storage Systems. , 2019, , .		0
79	Multiple Action Movement Control Scheme for Assistive Robot Based on Binary Motor Imagery EEG. Lecture Notes in Electrical Engineering, 2021, , 760-768.	0.4	O
80	Graphene Film Based Wireless and Flexibly Wearable Sensor for Human Joint Angle Measurement. , 2021, , .		0
81	Construction and Analysis of Balance Ability Test Model Based on Multi-modal Parameters. , 2022, , .		0
82	A Study of Intelligent Rehabilitation Robot Imitation of Human Behavior Based on Kinect., 2021,,.		0