Haoyong Yu

List of Publications by Year in descending order

220 papers	6,912 citations	57719 44 h-index	76872 74 g-index
223 all docs	223 docs citations	223 times ranked	5115 citing authors

#	Article	IF	Citations
1	Humanâ€“Robot Interaction Control of Rehabilitation Robots With Series Elastic Actuators. IEEE Transactions on Robotics, 2015, 31, 1089-1100.	7.3	270
2	Composite Learning From Adaptive Dynamic Surface Control. IEEE Transactions on Automatic Control, 2016, 61, 2603-2609.	3.6	217
3	A Review of Lower Extremity Assistive Robotic Exoskeletons in Rehabilitation Therapy. Critical Reviews in Biomedical Engineering, 2013, 41, 343-363.	0.5	211
4	Integral Sliding Mode Control: Performance, Modification, and Improvement. IEEE Transactions on Industrial Informatics, 2018, 14, 3087-3096.	7.2	201
5	An Adaptive Shared Control System for an Intelligent Mobility Aid for the Elderly. Autonomous Robots, 2003, 15, 53-66.	3.2	196
6	Robust Speed Regulation for PMSM Servo System With Multiple Sources of Disturbances via an Augmented Disturbance Observer. IEEE/ASME Transactions on Mechatronics, 2018, 23, 769-780.	3.7	170
7	Robotic Personal Aids for Mobility and Monitoring for the Elderly. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2006, 14, 344-351.	2.7	163
8	PAMM - a robotic aid to the elderly for mobility assistance and monitoring: a "helping-hand" for the elderly. , 0, , .		147
9	Adaptive Humanâ€“Robot Interaction Control for Robots Driven by Series Elastic Actuators. IEEE Transactions on Robotics, 2017, 33, 169-182.	7.3	143
10	Adaptive Command-Filtered Backstepping Control of Robot Arms With Compliant Actuators. IEEE Transactions on Control Systems Technology, 2018, 26, 1149-1156.	3.2	138
11	Kinematic comparison of surgical tendon-driven manipulators and concentric tube manipulators. Mechanism and Machine Theory, 2017, 107, 148-165.	2.7	135
12	A review of long range piezoelectric motors using frequency leveraged method. Sensors and Actuators A: Physical, 2015, 235, 240-255.	2.0	131
13	Composite learning robot control with guaranteed parameter convergence. Automatica, 2018, 89, 398-406.	3.0	127
14	A Novel Stickâ€“Slip Piezoelectric Actuator Based on a Triangular Compliant Driving Mechanism. IEEE Transactions on Industrial Electronics, 2019, 66, 5374-5382.	5.2	119
15	Iterative learning impedance control for rehabilitation robots driven by series elastic actuators. Automatica, 2018, 90, 1-7.	3.0	117
16	Efficient PID Tracking Control of Robotic Manipulators Driven by Compliant Actuators. IEEE Transactions on Control Systems Technology, 2019, 27, 915-922.	3.2	111
17	A brain-inspired spiking neural network model with temporal encoding and learning. Neurocomputing, 2014, 138, 3-13.	3.5	106
18	An Acceleration-Based Robust Motion Controller Design for a Novel Series Elastic Actuator. IEEE Transactions on Industrial Electronics, 2016, 63, 1900-1910.	5.2	106

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19	Biomimetic Hybrid Feedback Feedforward Neural-Network Learning Control. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 1481-1487.	7.2	106
20	Composite Learning Robot Control With Friction Compensation: A Neural Network-Based Approach. IEEE Transactions on Industrial Electronics, 2019, 66, 7841-7851.	5.2	106
21	Hybrid feedback feedforward: An efficient design of adaptive neural network control. Neural Networks, 2016, 76, 122-134.	3.3	103
22	Mechanical design and evaluation of a compact portable kneeâ€“ankleâ€“foot robot for gait rehabilitation. Mechanism and Machine Theory, 2016, 103, 51-64.	2.7	99
23	A novel constrained wire-driven flexible mechanism and its kinematic analysis. Mechanism and Machine Theory, 2016, 95, 59-75.	2.7	98
24	Control design of a novel compliant actuator for rehabilitation robots. Mechatronics, 2013, 23, 1072-1083.	2.0	97
25	Composite learning from adaptive backstepping neural network control. Neural Networks, 2017, 95, 134-142.	3.3	97
26	Electromagnetic Positioning for Tip Tracking and Shape Sensing of Flexible Robots. IEEE Sensors Journal, 2015, 15, 4565-4575.	2.4	94
27	6-D Magnetic Localization and Orientation Method for an Annular Magnet Based on a Closed-Form Analytical Model. IEEE Transactions on Magnetics, 2014, 50, 1-11.	1.2	90
28	Dynamic surface control via singular perturbation analysis. Automatica, 2015, 57, 29-33.	3.0	85
29	Real-Time Shape Estimation for Wire-Driven Flexible Robots With Multiple Bending Sections Based on Quadratic BÃ©zier Curves. IEEE Sensors Journal, 2015, 15, 6326-6334.	2.4	82
30	Academic Review and Perspectives on Robotic Exoskeletons. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 2294-2304.	2.7	80
31	Design and control of a novel compliant differential shape memory alloy actuator. Sensors and Actuators A: Physical, 2015, 225, 71-80.	2.0	79
32	Omni-Directional Mobility Using Active Split Offset Castors. Journal of Mechanical Design, Transactions of the ASME, 2004, 126, 822-829.	1.7	77
33	On Time-Synchronized Stability and Control. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 2450-2463.	5.9	72
34	Shape reconstruction for wire-driven flexible robots based on BÃ©zier curve and electromagnetic positioning. Mechatronics, 2015, 29, 28-35.	2.0	71
35	Composite adaptive dynamic surface control using online recorded data. International Journal of Robust and Nonlinear Control, 2016, 26, 3921-3936.	2.1	71
36	Multi-modal control scheme for rehabilitation robotic exoskeletons. International Journal of Robotics Research, 2017, 36, 759-777.	5.8	71

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37	Robust Sliding Mode Control for Robots Driven by Compliant Actuators. IEEE Transactions on Control Systems Technology, 2019, 27, 1259-1266.	3.2	70
38	Machine health condition prediction via online dynamic fuzzy neural networks. Engineering Applications of Artificial Intelligence, 2014, 35, 105-113.	4.3	67
39	Composite learning control of robotic systems: A least squares modulated approach. Automatica, 2020, 111, 108612.	3.0	66
40	Locomotive Control of a Wearable Lower Exoskeleton for Walking Enhancement. JVC/Journal of Vibration and Control, 2006, 12, 1311-1336.	1.5	48
41	Output-Feedback Adaptive Neural Control of a Compliant Differential SMA Actuator. IEEE Transactions on Control Systems Technology, 2017, 25, 2202-2210.	3.2	48
42	Continuous sliding mode control of compliant robot arms: A singularly perturbed approach. Mechatronics, 2018, 52, 127-134.	2.0	48
43	Adaptive Neural PD Control With Semiglobal Asymptotic Stabilization Guarantee. IEEE Transactions on Neural Networks and Learning Systems, 2014, 25, 2264-2274.	7.2	47
44	A Unified Robust Motion Controller Design for Series Elastic Actuators. IEEE/ASME Transactions on Mechatronics, 2017, 22, 2229-2240.	3.7	47
45	Practically Oriented Finite-Time Control Design and Implementation: Application to a Series Elastic Actuator. IEEE Transactions on Industrial Electronics, 2018, 65, 4166-4176.	5.2	47
46	Gait-Event-Based Synchronization Method for Gait Rehabilitation Robots via a Bioinspired Adaptive Oscillator. IEEE Transactions on Biomedical Engineering, 2017, 64, 1345-1356.	2.5	46
47	Robust adaptive motion tracking of piezoelectric actuated stages using online neural-network-based sliding mode control. Mechanical Systems and Signal Processing, 2021, 150, 107235.	4.4	44
48	A Nonsmooth Composite Control Design Framework for Nonlinear Systems With Mismatched Disturbances: Algorithms and Experimental Tests. IEEE Transactions on Industrial Electronics, 2018, 65, 8828-8839.	5.2	42
49	ROBOTICS IN NATURAL ORIFICE TRANSLUMINAL ENDOSCOPIC SURGERY. Journal of Mechanics in Medicine and Biology, 2013, 13, 1350044.	0.3	41
50	Lower-Limb Exoskeleton With Variable-Structure Series Elastic Actuators: Phase-Synchronized Force Control for Gait Asymmetry Correction. IEEE Transactions on Robotics, 2021, 37, 763-779.	7.3	41
51	Self-Contained Pedestrian Tracking During Normal Walking Using an Inertial/Magnetic Sensor Module. IEEE Transactions on Biomedical Engineering, 2014, 61, 892-899.	2.5	40
52	Development of NTU wearable exoskeleton system for assistive technologies. , 0, , .		38
53	Robust model predictive control for constrained continuous-time nonlinear systems. International Journal of Control, 2018, 91, 359-368.	1.2	38
54	Model reference composite learning control without persistency of excitation. IET Control Theory and Applications, 2016, 10, 1963-1971.	1.2	37

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55	Design of a Novel Flexible Endoscopeâ€"Cardioscope. Journal of Mechanisms and Robotics, 2016, 8, .	1.5	37
56	Hybrid FESâ€"robotic gait rehabilitation technologies: a review on mechanical design, actuation, and control strategies. International Journal of Intelligent Robotics and Applications, 2018, 2, 1-28.	1.6	37
57	Toward Gait Symmetry Enhancement via a Cable-Driven Exoskeleton Powered by Series Elastic Actuators. IEEE Robotics and Automation Letters, 2022, 7, 786-793.	3.3	35
58	Adaptive fuzzy PD control with stable Hâˆž tracking guarantee. Neurocomputing, 2017, 237, 71-78.	3.5	34
59	Predictive Locomotion Mode Recognition and Accurate Gait Phase Estimation for Hip Exoskeleton on Various Terrains. IEEE Robotics and Automation Letters, 2022, 7, 6439-6446.	3.3	34
60	Statics modeling of an underactuated wire-driven flexible robotic arm. , 2014, , .		33
61	New Approach to Fixed-Order Output-Feedback Control for Piecewise-Affine Systems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 2961-2969.	3.5	33
62	Mechanical design of a portable knee-ankle-foot robot. , 2013, , .		31
63	A Novel Precision Measuring Parallel Mechanism for the Closed-Loop Control of a Biologically Inspired Lower Limb Exoskeleton. IEEE/ASME Transactions on Mechatronics, 2018, 23, 2693-2703.	3.7	28
64	On parameter convergence in least squares identification and adaptive control. International Journal of Robust and Nonlinear Control, 2019, 29, 2898-2911.	2.1	28
65	Nonâ€linearâ€disturbanceâ€observerâ€enhanced MPC for motion control systems with multiple disturbances. IET Control Theory and Applications, 2020, 14, 63-72.	1.2	28
66	Peaking-Free Output-Feedback Adaptive Neural Control Under a Nonseparation Principle. IEEE Transactions on Neural Networks and Learning Systems, 2015, 26, 3097-3108.	7.2	27
67	Bifurcation variations and motion-ruled-surface evolution of a novel Schatz linkage induced metamorphic mechanism. Mechanism and Machine Theory, 2020, 150, 103867.	2.7	27
68	Generalized Dynamic Predictive Control for Nonparametric Uncertain Systems With Application to Series Elastic Actuators. IEEE Transactions on Industrial Informatics, 2018, 14, 4829-4840.	7.2	26
69	Biomechanical effects of body weight support with a novel robotic walker for over-ground gait rehabilitation. Medical and Biological Engineering and Computing, 2017, 55, 315-326.	1.6	25
70	Toward a Transform Method From Lighthill Fish Swimming Model to Biomimetic Robot Fish. IEEE Robotics and Automation Letters, 2018, 3, 2632-2639.	3.3	25
71	High-order based revelation of bifurcation of novel Schatz-inspired metamorphic mechanisms using screw theory. Mechanism and Machine Theory, 2020, 152, 103931.	2.7	25
72	Global Asymptotic Stabilization Using Adaptive Fuzzy PD Control. IEEE Transactions on Cybernetics, 2015, 45, 574-582.	6.2	24

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73	Online dataâ€driven composite adaptive backstepping control with exact differentiators. International Journal of Adaptive Control and Signal Processing, 2016, 30, 779-789.	2.3	24
74	Continuous Tracking Control for a Compliant Actuator With Two-Stage Stiffness. IEEE Transactions on Automation Science and Engineering, 2018, 15, 57-66.	3.4	24
75	Identification and Control of Nonlinear Systems Using Neural Networks: A Singularity-Free Approach. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 2696-2706.	7.2	24
76	Stability Analysis for Input Saturated Discrete-Time Switched Systems With Average Dwell-Time. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 412-419.	5.9	24
77	Robust position control of a novel series elastic actuator via disturbance observer. , 2015, , .		22
78	An Improved Magnetic Tracking Method Using Rotating Uniaxial Coil With Sparse Points and Closed Form Analytic Solution. IEEE Sensors Journal, 2014, 14, 3585-3592.	2.4	21
79	A Practical Tuning Method for the Robust PID Controller with Velocity Feed-Back. Machines, 2015, 3, 208-222.	1.2	21
80	Phase-Synchronized Assistive Torque Control for the Correction of Kinematic Anomalies in the Gait Cycle. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 2305-2314.	2.7	21
81	Real-Time Avoidance Strategy of Dynamic Obstacles via Half Model-Free Detection and Tracking With 2D Lidar for Mobile Robots. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2215-2225.	3.7	21
82	Intelligent fault monitoring and diagnosis in electrical machines. Measurement: Journal of the International Measurement Confederation, 2013, 46, 3640-3646.	2.5	20
83	Simplified adaptive neural control of strict-feedback nonlinear systems. Neurocomputing, 2015, 159, 251-256.	3.5	20
84	Developing a Mobile Lower Limb Robotic Exoskeleton for Gait Rehabilitation. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.4	19
85	Restriction of pelvic lateral and rotational motions alters lower limb kinematics and muscle activation pattern during over-ground walking. Medical and Biological Engineering and Computing, 2016, 54, 1621-1629.	1.6	19
86	Six novel 6R metamorphic mechanisms induced from three-series-connected Bennett linkages that vary among classical linkages. Mechanism and Machine Theory, 2021, 156, 104133.	2.7	19
87	Task-related brain functional network reconfigurations relate to motor recovery in chronic subcortical stroke. Scientific Reports, 2021, 11, 8442.	1.6	19
88	A linear actuator for precision positioning of dual objects. Smart Materials and Structures, 2015, 24, 125039.	1.8	18
89	A robotic knee exoskeleton for walking assistance and connectivity topology exploration in EEG signal. , 2016, , .		18
90	A novel constrained tendon-driven serpentine manipulator. , 2015, , .		17

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91	Efficient learning from adaptive control under sufficient excitation. International Journal of Robust and Nonlinear Control, 2019, 29, 3111-3124.	2.1	17
92	A Sliding Mode Force and Position Controller Synthesis for Series Elastic Actuators. Robotica, 2020, 38, 15-28.	1.3	17
93	Fully Distributed Cooperative Circumnavigation of Networked Unmanned Aerial Vehicles. IEEE/ASME Transactions on Mechatronics, 2021, 26, 709-718.	3.7	17
94	Gait event detection through neuromorphic spike sequence learning. , 2014, , .		16
95	A piezo-driven flapping wing mechanism for micro air vehicles. Microsystem Technologies, 2017, 23, 967-973.	1.2	16
96	Experimental evaluation of a novel robotic hospital bed mover with omni-directional mobility. Applied Ergonomics, 2017, 65, 389-397.	1.7	16
97	Time-Synchronized Control for Disturbed Systems. IEEE Transactions on Cybernetics, 2022, 52, 8703-8715.	6.2	16
98	Composite learning control with application to inverted pendulums. , 2015, , .		15
99	Resistance training using a novel robotic walker for over-ground gait rehabilitation: a preliminary study on healthy subjects. Medical and Biological Engineering and Computing, 2017, 55, 1873-1881.	1.6	15
100	A novel compact compliant actuator design for rehabilitation robots. , 2013, 2013, 6650478.		14
101	Design of a novel robotic over-ground walking device for gait rehabilitation. , 2014, , .		14
102	Composite Learning Fuzzy Control of Uncertain Nonlinear Systems. International Journal of Fuzzy Systems, 2016, 18, 990-998.	2.3	14
103	A Novel De-Noising Method for Improving the Performance of Full-Waveform LiDAR Using Differential Optical Path. Remote Sensing, 2017, 9, 1109.	1.8	14
104	Development and evaluation of a novel overground robotic walker for pelvic motion support. , 2015, , .		13
105	What Are Spectral and Spatial Distributions of EEG-EMG Correlations in Overground Walking? An Exploratory Study. IEEE Access, 2019, 7, 143935-143946.	2.6	13
106	Adaptive Fuzzy Inverse Optimal Fixed-Time Control of Uncertain Nonlinear Systems. IEEE Transactions on Fuzzy Systems, 2022, 30, 3857-3868.	6.5	13
107	Analysis and design of an omnidirectional platform for operation on non-ideal floors. , 0, , .		12
108	Design and analysis of a novel compact compliant actuator with variable impedance. , 2012, , .		12

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109	Gait phase detection in able-bodied subjects and dementia patients. , 2013, 2013, 4907-10.		12
110	Fast and lowâ€frequency adaptation in neural network control. IET Control Theory and Applications, 2014, 8, 2062-2069.	1.2	12
111	A Study on Kinematic Pattern of Fish Undulatory Locomotion Using a Robot Fish. Journal of Mechanisms and Robotics, 2018, 10, .	1.5	12
112	Power Augmentation of Upper Extremity by Using Agonist Electromyography Signals Only for Extended Admittance Control. IEEJ Journal of Industry Applications, 2014, 3, 260-269.	0.9	11
113	Output Feedback Adaptive Neural Control Without Seeking SPR Condition. Asian Journal of Control, 2015, 17, 1620-1630.	1.9	11
114	Modeling and simulations of three-dimensional laser imaging based on space-variant structure. Optics and Laser Technology, 2016, 78, 62-70.	2.2	11
115	Discussions on Smooth Modifications of Integral Sliding Mode Control. International Journal of Control, Automation and Systems, 2018, 16, 586-593.	1.6	11
116	Investigation on a New Approach for Designing Articulated Soft Robots With Discrete Variable Stiffness. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2998-3009.	3.7	11
117	GTac: A Biomimetic Tactile Sensor With Skin-Like Heterogeneous Force Feedback for Robots. IEEE Sensors Journal, 2022, 22, 14491-14500.	2.4	11
118	Preliminary design analysis of a novel variable impedance compact compliant actuator. , 2011, , .		10
119	Practical PID controller tuning for motion control. , 2015, , .		10
120	Real-Time Hierarchical Classification of Time Series Data for Locomotion Mode Detection. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 1749-1760.	3.9	10
121	A novel gait phase-based control strategy for a portable knee-ankle-foot robot. , 2015, , .		9
122	Design and Evaluation of a Motorized Robotic Bed Mover With Omnidirectional Mobility for Patient Transportation. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 1775-1785.	3.9	9
123	Feature Extraction of Shoulder Jointâ€™s Voluntary Flexion-Extension Movement Based on Electroencephalography Signals for Power Assistance. Bioengineering, 2019, 6, 2.	1.6	9
124	Degeneration of structural brain networks is associated with cognitive decline after ischaemic stroke. Brain Communications, 2020, 2, fcaa155.	1.5	9
125	A Piecewise Monotonic Smooth Phase Variable for Speed-Adaptation Control of Powered Knee-Ankle Prostheses. IEEE Robotics and Automation Letters, 2022, 7, 8526-8533.	3.3	9
126	Bioinspired Amphibious Origami Robot with Body Sensing for Multimodal Locomotion. Soft Robotics, 2022, 9, 1198-1209.	4.6	9

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127	A novel tele-operated flexible surgical arm with optimal trajectory tracking aiming for minimally invasive neurosurgery. , 2015, , .		8
128	An Active Disturbance Rejection controller design for the robust position control of Series Elastic Actuators. , 2016, , .		8
129	Design of an SSVEP-based BCI system with visual servo module for a service robot to execute multiple tasks. , 2017, , .		8
130	GTac-Gripper: A Reconfigurable Under-Actuated Four-Fingered Robotic Gripper With Tactile Sensing. IEEE Robotics and Automation Letters, 2022, 7, 7232-7239.	3.3	8
131	Fast and robust extraction of surrogate respiratory signal from intra-operative liver ultrasound images. International Journal of Computer Assisted Radiology and Surgery, 2013, 8, 1027-1035.	1.7	7
132	Biomimetic hybrid feedback feedforword adaptive neural control of robotic arms. , 2014, , .		7
133	A nonlinear stability analysis for the robust position control problem of robot manipulators via disturbance observer. , 2015, , .		7
134	A sliding mode controller design for the robust position control problem of series elastic actuators. , 2017, , .		7
135	Global Dynamic Nonrecursive Realization of Decentralized Nonsmooth Exact Tracking for Large-Scale Interconnected Nonlinear Systems. IEEE Transactions on Cybernetics, 2019, 49, 3521-3531.	6.2	7
136	Manipulating Objects with a Power Assist Robot in Linear Vertical and Harmonic Motion: Psychophysical-Biomechanical Approach to Analyzing Human Characteristics to Improve the Control. Journal of Biomechanical Science and Engineering, 2011, 6, 399-414.	0.1	6
137	A Supine Gait Training Device for Stroke Rehabilitation1. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.4	6
138	Composite learning from model reference adaptive fuzzy control. , 2015, , .		6
139	Optimal teleoperation control of a constrained tendon-driven serpentine manipulator. , 2015, , .		6
140	Power analysis of a series elastic actuator for ankle joint gait rehabilitation. , 2015, , .		6
141	Method based on bioinspired sample improves autofocusing performances. Optical Engineering, 2016, 55, 103103.	0.5	6
142	A robust force controller design for series elastic actuators. , 2017, , .		6
143	Composite learning adaptive backstepping control using neural networks with compact supports. International Journal of Adaptive Control and Signal Processing, 2019, 33, 1726-1738.	2.3	6
144	A Novel Articulated Soft Robot Capable of Variable Stiffness through Bistable Structure. , 2020, , .		6

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145	GSG: A Granary-Shaped Soft Gripper With Mechanical Sensing via Snap-Through Structure. IEEE Robotics and Automation Letters, 2022, 7, 9421-9428.	3.3	6
146	Power assistance on slope of an omnidirectional hybrid walker and wheelchair. , 2012, , .		5
147	Design of a novel compliant differential Shape Memory Alloy actuator. , 2013, , .		5
148	EMG estimation from EEGs for constructing a power assist system. , 2014, , .		5
149	Study on mathematic magnetic field model of rectangular coils for magnetic actuation. , 2015, , .		5
150	Single trial EEG classification of lower-limb movements using improved regularized common spatial pattern. , 2015, , .		5
151	An intelligent technique for posture and fall detection using multiscale entropy analysis and fuzzy logic. , 2016, , .		5
152	Composite learning: An efficient way of parameter estimation in adaptive control. , 2016, , .		5
153	Robustness analysis of composite adaptive robot control. , 2016, , .		5
154	Identification of gait-related brain activity using electroencephalographic signals. , 2017, , .		5
155	Estimation of Upper Limb Kinematics with a Magnetometer-Free Egocentric Visual-Inertial System. , 2022, , .		5
156	Walking Support and Power Assistance of a Wheelchair Typed Omnidirectional Mobile Robot with Admittance Control. , 2011, , .		4
157	Novel biomimetic control of a power assist robot for horizontal transfer of objects. , 2011, , .		4
158	Novel automatic posture detection for in-patient care using IMU sensors. , 2013, , .		4
159	A Portable Powered Knee-Ankle- Foot Orthosis1. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.4	4
160	Technical Note: Automatic real-time ultrasound tracking of respiratory signal using selective filtering and dynamic template matching. Medical Physics, 2015, 42, 4536-4541.	1.6	4
161	Development of a human computer interaction system based on multi-modal gaze tracking methods. , 2016, , .		4
162	Unbalance detection to avoid falls with the use of a smart walker. , 2016, , .		4

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163	Design and experimental validation of a linear piezoelectric micromotor for dual-slider positioning. Microsystem Technologies, 2017, 23, 2363-2370.	1.2	4
164	Adaptive Impedance Control for Compliantly Actuated Robots with a Unified Safety Measure. , 2018, , .		4
165	Omnidirectional Platforms for Gait Training: Admittance-Shaping Control for Enhanced Mobility. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 101, 1.	2.0	4
166	A New 4M Model-Based Human-Machine Interface for Lower Extremity Exoskeleton Robot. Lecture Notes in Computer Science, 2012, , 545-554.	1.0	4
167	Enhanced parameter estimation in adaptive control via online historical data. IET Control Theory and Applications, 2019, 13, 2710-2716.	1.2	4
168	Unknown System Dynamics Estimator for Nonlinear Uncertain Systems. IFAC-PapersOnLine, 2020, 53, 554-559.	0.5	4
169	A Deep Learning Based End-to-End Locomotion Mode Detection Method for Lower Limb Wearable Robot Control. , 2020, , .		4
170	Decentralized Adaptive Neural Inverse Optimal Control of Nonlinear Interconnected Systems. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 8840-8851.	7.2	4
171	Design and Study of Scissor-Mechanism-Based Pneumatic Actuator With a Characteristic of Bidirectional Contraction. IEEE/ASME Transactions on Mechatronics, 2022, 27, 2080-2088.	3.7	4
172	Lowering objects manually and with power-assist: Distinctions in perceived heaviness, load forces and object motions. , 2011, , .		3
173	Leader-Based Consensus of Heterogeneous Nonlinear Multiagent Systems. Mathematical Problems in Engineering, 2014, 2014, 1-6.	0.6	3
174	Effects of compliant and flexible trunks on peak-power of a lizard-inspired robot. , 2015, , .		3
175	Biomimetic composite learning for robot motion control. , 2016, , .		3
176	Development of a novel robotic omni-directional hospital bed mover for patient transfer. , 2016, , .		3
177	Least-squares learning control with guaranteed parameter convergence. , 2016, , .		3
178	An Omnidirectional Assistive Platform Integrated With Functional Electrical Stimulation for Gait Rehabilitation: A Case Study. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 710-719.	2.7	3
179	A Dynamic Liver Phantom for Ultrasound Image Guided Biopsy. IFMBE Proceedings, 2014, , 152-155.	0.2	3
180	Construction of real-time BMI control system based on motor imagery. , 2011, , .		2

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181	Bipedal locomotion modeled as the central pattern generator (CPG) and regulated by self organizing map for model of cortex. , 2013, , .		2
182	Depth estimation and object recognition in dark environments using ATIS. , 2014, , .		2
183	Power assistance of an omnidirectional hybrid walker and wheelchair with admittance model and Iterative Learning Control. , 2014, , .		2
184	Gait event-based human-robot synchrony for gait rehabilitation using adaptive oscillator. , 2015, , .		2
185	Estimation of EMG signal for shoulder joint based on EEG signals for the control of upper-limb power assistance devices. , 2017, , .		2
186	Design and Model Analysis of a Robotic Joint with Circular Electro-hydraulic Actuator. , 2018, , .		2
187	Algorithmic Resolution of Multiple Impacts in Nonsmooth Mechanical Systems with Switching Constraints. , 2019, , .		2
188	Modeling and Experimental Verification of a Dual-slider Piezo-actuated Linear Motor. Instruments and Experimental Techniques, 2019, 62, 876-880.	0.1	2
189	On performance recovery of robust dynamic surface control. International Journal of Robust and Nonlinear Control, 2020, 30, 3094-3109.	2.1	2
190	Gait Phase Subdivision and Leg Stiffness Estimation During Stair Climbing. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 860-868.	2.7	2
191	Motion support of upper extremity with agonist alone under negative admittance control. , 2012, , .		1
192	A preliminary study on mathematic modeling of annular magnets in magnetic tracking systems. , 2014, , .		1
193	Mechanical Design and Evaluation of a Novel Knee-Ankle-Foot Robot for Rehabilitation. , 2015, , .		1
194	Investigation of the EEG scalp distribution for estimation of shoulder joint torque in the upper-limb power assistant system. , 2016, , .		1
195	Biomechanical effects of robot assisted walking on knee joint kinematics and muscle activation pattern. , 2017, 2017, 252-257.		1
196	Modelling and control of a novel walker robot for post-stroke gait rehabilitation. , 2017, , .		1
197	Subject-specific and respiration-corrected 4D liver model from real-time ultrasound image sequences. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2018, 6, 7-16.	1.3	1
198	A novel energy efficient electro-hydraulic actuation system and its force control design. , 2018, , .		1

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199	Motion Estimation for the Control of Upper Limb Wearable Exoskeleton Robot with Electroencephalography Signals. , 2018, , .		1
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