

# Haoyong Yu

## List of Publications by Year in descending order

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220  
papers

6,912  
citations

57758

44  
h-index

76900

74  
g-index

223  
all docs

223  
docs citations

223  
times ranked

5115  
citing authors

#	ARTICLE	IF	CITATIONS
1	Decentralized Adaptive Neural Inverse Optimal Control of Nonlinear Interconnected Systems. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 8840-8851.	11.3	4
2	On Time-Synchronized Stability and Control. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 2450-2463.	9.3	72
3	Real-Time Hierarchical Classification of Time Series Data for Locomotion Mode Detection. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 1749-1760.	6.3	10
4	Time-Synchronized Control for Disturbed Systems. IEEE Transactions on Cybernetics, 2022, 52, 8703-8715.	9.5	16
5	Sensorless Control for Unsymmetrical Bistable Multimagnetic Circuit Permanent Magnet Actuator Based on High-Frequency Signal Injection and High-Pass Filter Circuit. IEEE Transactions on Industrial Electronics, 2022, 69, 10859-10869.	7.9	0
6	Adaptive Fuzzy Inverse Optimal Fixed-Time Control of Uncertain Nonlinear Systems. IEEE Transactions on Fuzzy Systems, 2022, 30, 3857-3868.	9.8	13
7	Toward Gait Symmetry Enhancement via a Cable-Driven Exoskeleton Powered by Series Elastic Actuators. IEEE Robotics and Automation Letters, 2022, 7, 786-793.	5.1	35
8	Gait Phase Subdivision and Leg Stiffness Estimation During Stair Climbing. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 860-868.	4.9	2
9	Indirect adaptive control of multi-input-multi-output nonlinear singularly perturbed systems with model uncertainties. Neurocomputing, 2022, 491, 104-116.	5.9	1
10	Predictive Locomotion Mode Recognition and Accurate Gait Phase Estimation for Hip Exoskeleton on Various Terrains. IEEE Robotics and Automation Letters, 2022, 7, 6439-6446.	5.1	34
11	Design and Study of Scissor-Mechanism-Based Pneumatic Actuator With a Characteristic of Bidirectional Contraction. IEEE/ASME Transactions on Mechatronics, 2022, 27, 2080-2088.	5.8	4
12	GTac: A Biomimetic Tactile Sensor With Skin-Like Heterogeneous Force Feedback for Robots. IEEE Sensors Journal, 2022, 22, 14491-14500.	4.7	11
13	A Piecewise Monotonic Smooth Phase Variable for Speed-Adaptation Control of Powered Knee-Ankle Prostheses. IEEE Robotics and Automation Letters, 2022, 7, 8526-8533.	5.1	9
14	Bioinspired Amphibious Origami Robot with Body Sensing for Multimodal Locomotion. Soft Robotics, 2022, 9, 1198-1209.	8.0	9
15	GTac-Gripper: A Reconfigurable Under-Actuated Four-Fingered Robotic Gripper With Tactile Sensing. IEEE Robotics and Automation Letters, 2022, 7, 7232-7239.	5.1	8
16	GSG: A Granary-Shaped Soft Gripper With Mechanical Sensing via Snap-Through Structure. IEEE Robotics and Automation Letters, 2022, 7, 9421-9428.	5.1	6
17	Estimation of Upper Limb Kinematics with a Magnetometer-Free Egocentric Visual-Inertial System. , 2022, , .		5
18	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.	9.3	24

#	ARTICLE	IF	CITATIONS
19	Six novel 6R metamorphic mechanisms induced from three-series-connected Bennett linkages that vary among classical linkages. <i>Mechanism and Machine Theory</i> , 2021, 156, 104133.	4.5	19
20	Robust adaptive motion tracking of piezoelectric actuated stages using online neural-network-based sliding mode control. <i>Mechanical Systems and Signal Processing</i> , 2021, 150, 107235.	8.0	44
21	Real-Time Avoidance Strategy of Dynamic Obstacles via Half Model-Free Detection and Tracking With 2D Lidar for Mobile Robots. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021, 26, 2215-2225.	5.8	21
22	Investigation on a New Approach for Designing Articulated Soft Robots With Discrete Variable Stiffness. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021, 26, 2998-3009.	5.8	11
23	Omnidirectional Platforms for Gait Training: Admittance-Shaping Control for Enhanced Mobility. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2021, 101, 1.	3.4	4
24	Task-related brain functional network reconfigurations relate to motor recovery in chronic subcortical stroke. <i>Scientific Reports</i> , 2021, 11, 8442.	3.3	19
25	Fully Distributed Cooperative Circumnavigation of Networked Unmanned Aerial Vehicles. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021, 26, 709-718.	5.8	17
26	Lower-Limb Exoskeleton With Variable-Structure Series Elastic Actuators: Phase-Synchronized Force Control for Gait Asymmetry Correction. <i>IEEE Transactions on Robotics</i> , 2021, 37, 763-779.	10.3	41
27	Hysteresis modeling and compensation of a rotary series elastic actuator with nonlinear stiffness. <i>Review of Scientific Instruments</i> , 2021, 92, 095005.	1.3	0
28	Nonlinear Disturbance Observer-based Robust Motion Control for Multi-joint Series Elastic Actuator-driven Robots. , 2021, , .		1
29	A Sliding Mode Force and Position Controller Synthesis for Series Elastic Actuators. <i>Robotica</i> , 2020, 38, 15-28.	1.9	17
30	Composite learning control of robotic systems: A least squares modulated approach. <i>Automatica</i> , 2020, 111, 108612.	5.0	66
31	Degeneration of structural brain networks is associated with cognitive decline after ischaemic stroke. <i>Brain Communications</i> , 2020, 2, fcaa155.	3.3	9
32	A Novel Articulated Soft Robot Capable of Variable Stiffness through Bistable Structure. , 2020, , .		6
33	Bifurcation variations and motion-ruled-surface evolution of a novel Schatz linkage induced metamorphic mechanism. <i>Mechanism and Machine Theory</i> , 2020, 150, 103867.	4.5	27
34	A Unified Method for Vision Aided Navigation of Autonomous Systems. , 2020, , .		0
35	High-order based revelation of bifurcation of novel Schatz-inspired metamorphic mechanisms using screw theory. <i>Mechanism and Machine Theory</i> , 2020, 152, 103931.	4.5	25
36	A novel piezo-actuated flapping mechanism based on inertia drive. <i>Journal of Intelligent Material Systems and Structures</i> , 2020, 31, 1782-1792.	2.5	1

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37	On performance recovery of robust dynamic surface control. International Journal of Robust and Nonlinear Control, 2020, 30, 3094-3109.	3.7	2
38	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.	4.9	3
39	Nonlinear disturbance observer-enhanced MPC for motion control systems with multiple disturbances. IET Control Theory and Applications, 2020, 14, 63-72.	2.1	28
40	Unknown System Dynamics Estimator for Nonlinear Uncertain Systems. IFAC-PapersOnLine, 2020, 53, 554-559.	0.9	4
41	A Deep Learning Based End-to-End Locomotion Mode Detection Method for Lower Limb Wearable Robot Control. , 2020, , .		4
42	What Are Spectral and Spatial Distributions of EEG-EMG Correlations in Overground Walking? An Exploratory Study. IEEE Access, 2019, 7, 143935-143946.	4.2	13
43	Academic Review and Perspectives on Robotic Exoskeletons. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 2294-2304.	4.9	80
44	High mobility control of an omnidirectional platform for gait rehabilitation after stroke. , 2019, 2019, 694-700.		1
45	Algorithmic Resolution of Multiple Impacts in Nonsmooth Mechanical Systems with Switching Constraints. , 2019, , .		2
46	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.	4.9	21
47	Feature Extraction of Shoulder Joint's Voluntary Flexion-Extension Movement Based on Electroencephalography Signals for Power Assistance. Bioengineering, 2019, 6, 2.	3.5	9
48	Composite learning adaptive backstepping control using neural networks with compact supports. International Journal of Adaptive Control and Signal Processing, 2019, 33, 1726-1738.	4.1	6
49	On parameter convergence in least squares identification and adaptive control. International Journal of Robust and Nonlinear Control, 2019, 29, 2898-2911.	3.7	28
50	Efficient learning from adaptive control under sufficient excitation. International Journal of Robust and Nonlinear Control, 2019, 29, 3111-3124.	3.7	17
51	Modeling and Experimental Verification of a Dual-slider Piezo-actuated Linear Motor. Instruments and Experimental Techniques, 2019, 62, 876-880.	0.5	2
52	Composite Learning Robot Control With Friction Compensation: A Neural Network-Based Approach. IEEE Transactions on Industrial Electronics, 2019, 66, 7841-7851.	7.9	106
53	Global Dynamic Nonrecursive Realization of Decentralized Nonsmooth Exact Tracking for Large-Scale Interconnected Nonlinear Systems. IEEE Transactions on Cybernetics, 2019, 49, 3521-3531.	9.5	7
54	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.	11.3	24

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55	A Novel Stickâ€“Slip Piezoelectric Actuator Based on a Triangular Compliant Driving Mechanism. IEEE Transactions on Industrial Electronics, 2019, 66, 5374-5382.	7.9	119
56	Robust Sliding Mode Control for Robots Driven by Compliant Actuators. IEEE Transactions on Control Systems Technology, 2019, 27, 1259-1266.	5.2	70
57	Efficient PID Tracking Control of Robotic Manipulators Driven by Compliant Actuators. IEEE Transactions on Control Systems Technology, 2019, 27, 915-922.	5.2	111
58	An Integrated Robotic Mobile Platform and Functional Electrical Stimulation System for Gait Rehabilitation Post-Stroke. Biosystems and Biorobotics, 2019, , 425-429.	0.3	1
59	Enhanced parameter estimation in adaptive control via online historical data. IET Control Theory and Applications, 2019, 13, 2710-2716.	2.1	4
60	Generalized Dynamic Predictive Control for Nonparametric Uncertain Systems With Application to Series Elastic Actuators. IEEE Transactions on Industrial Informatics, 2018, 14, 4829-4840.	11.3	26
61	Discussions on Smooth Modifications of Integral Sliding Mode Control. International Journal of Control, Automation and Systems, 2018, 16, 586-593.	2.7	11
62	Practically Oriented Finite-Time Control Design and Implementation: Application to a Series Elastic Actuator. IEEE Transactions on Industrial Electronics, 2018, 65, 4166-4176.	7.9	47
63	Composite learning robot control with guaranteed parameter convergence. Automatica, 2018, 89, 398-406.	5.0	127
64	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.	5.8	170
65	Iterative learning impedance control for rehabilitation robots driven by series elastic actuators. Automatica, 2018, 90, 1-7.	5.0	117
66	Toward a Transform Method From Lighthill Fish Swimming Model to Biomimetic Robot Fish. IEEE Robotics and Automation Letters, 2018, 3, 2632-2639.	5.1	25
67	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.	2.8	37
68	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.	7.9	42
69	Continuous Tracking Control for a Compliant Actuator With Two-Stage Stiffness. IEEE Transactions on Automation Science and Engineering, 2018, 15, 57-66.	5.2	24
70	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.	1.9	1
71	Robust model predictive control for constrained continuous-time nonlinear systems. International Journal of Control, 2018, 91, 359-368.	1.9	38
72	Adaptive Command-Filtered Backstepping Control of Robot Arms With Compliant Actuators. IEEE Transactions on Control Systems Technology, 2018, 26, 1149-1156.	5.2	138

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73	Integral Sliding Mode Control: Performance, Modification, and Improvement. IEEE Transactions on Industrial Informatics, 2018, 14, 3087-3096.	11.3	201
74	The Shared Effects of Active Body Weight Support and Robot-Applied Resistance/Assistance on Temporal Gait Parameters and Gait Related Muscle Activity. , 2018, , .		0
75	Adaptive Impedance Control for Compliantly Actuated Robots with a Unified Safety Measure. , 2018, , .		4
76	A novel energy efficient electro-hydraulic actuation system and its force control design. , 2018, , .		1
77	Decentralized Robust Exact Tracking Control for 2-DOF Planar Robot Manipulator. , 2018, , .		0
78	Towards High Performance Quadrupedal Locomotion with Passive Hip Joint Compliance. , 2018, , .		0
79	Motion Estimation for the Control of Upper Limb Wearable Exoskeleton Robot with Electroencephalography Signals. , 2018, , .		1
80	Design and Model Analysis of a Robotic Joint with Circular Electro-hydraulic Actuator. , 2018, , .		2
81	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.	5.8	28
82	Continuous sliding mode control of compliant robot arms: A singularly perturbed approach. Mechatronics, 2018, 52, 127-134.	3.3	48
83	A Study on Kinematic Pattern of Fish Undulatory Locomotion Using a Robot Fish. Journal of Mechanisms and Robotics, 2018, 10, .	2.2	12
84	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.	6.3	9
85	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.	5.4	33
86	A quantitative evaluation function for 3D tree-like structure segmentations in liver images. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2017, 5, 45-53.	1.9	0
87	A piezo-driven flapping wing mechanism for micro air vehicles. Microsystem Technologies, 2017, 23, 967-973.	2.0	16
88	Biomimetic Hybrid Feedback Feedforward Neural-Network Learning Control. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 1481-1487.	11.3	106
89	Output-Feedback Adaptive Neural Control of a Compliant Differential SMA Actuator. IEEE Transactions on Control Systems Technology, 2017, 25, 2202-2210.	5.2	48
90	Multi-modal control scheme for rehabilitation robotic exoskeletons. International Journal of Robotics Research, 2017, 36, 759-777.	8.5	71

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91	Gait-Event-Based Synchronization Method for Gait Rehabilitation Robots via a Bioinspired Adaptive Oscillator. IEEE Transactions on Biomedical Engineering, 2017, 64, 1345-1356.	4.2	46
92	Experimental evaluation of a novel robotic hospital bed mover with omni-directional mobility. Applied Ergonomics, 2017, 65, 389-397.	3.1	16
93	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.	2.8	15
94	Adaptive Human-Robot Interaction Control for Robots Driven by Series Elastic Actuators. IEEE Transactions on Robotics, 2017, 33, 169-182.	10.3	143
95	Composite learning from adaptive backstepping neural network control. Neural Networks, 2017, 95, 134-142.	5.9	97
96	A sliding mode controller design for the robust position control problem of series elastic actuators. , 2017, , .		7
97	Estimation of EMG signal for shoulder joint based on EEG signals for the control of upper-limb power assistance devices. , 2017, , .		2
98	Design of an SSVEP-based BCI system with visual servo module for a service robot to execute multiple tasks. , 2017, , .		8
99	A Unified Robust Motion Controller Design for Series Elastic Actuators. IEEE/ASME Transactions on Mechatronics, 2017, 22, 2229-2240.	5.8	47
100	Design and experimental validation of a linear piezoelectric micromotor for dual-slider positioning. Microsystem Technologies, 2017, 23, 2363-2370.	2.0	4
101	Adaptive fuzzy PD control with stable $H^\infty$ tracking guarantee. Neurocomputing, 2017, 237, 71-78.	5.9	34
102	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.	2.8	25
103	Kinematic comparison of surgical tendon-driven manipulators and concentric tube manipulators. Mechanism and Machine Theory, 2017, 107, 148-165.	4.5	135
104	A robust force controller design for series elastic actuators. , 2017, , .		6
105	Construction of power assistive system for the control of upper limb wearable exoskeleton robot with electroencephalography signals. , 2017, , .		0
106	Biomechanical effects of robot assisted walking on knee joint kinematics and muscle activation pattern. , 2017, 2017, 252-257.		1
107	Modelling and control of a novel walker robot for post-stroke gait rehabilitation. , 2017, , .		1
108	Identification of gait-related brain activity using electroencephalographic signals. , 2017, , .		5

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109	A Novel De-Noising Method for Improving the Performance of Full-Waveform LiDAR Using Differential Optical Path. Remote Sensing, 2017, 9, 1109.	4.0	14
110	An Incremental Learning-Based Mechanism for Object Recognition in Cloud Robotic System. , 2017, , .		0
111	Adaptive-Oscillator-Based Control Strategy for Gait Rehabilitation Robots. Biosystems and Biorobotics, 2017, , 1365-1369.	0.3	1
112	Composite adaptive dynamic surface control using online recorded data. International Journal of Robust and Nonlinear Control, 2016, 26, 3921-3936.	3.7	71
113	Online data-driven composite adaptive backstepping control with exact differentiators. International Journal of Adaptive Control and Signal Processing, 2016, 30, 779-789.	4.1	24
114	Development of a human computer interaction system based on multi-modal gaze tracking methods. , 2016, , .		4
115	An intelligent technique for posture and fall detection using multiscale entropy analysis and fuzzy logic. , 2016, , .		5
116	Investigation of the EEG scalp distribution for estimation of shoulder joint torque in the upper-limb power assistant system. , 2016, , .		1
117	An Active Disturbance Rejection controller design for the robust position control of Series Elastic Actuators. , 2016, , .		8
118	Mechanical design and evaluation of a compact portable knee-ankle-foot robot for gait rehabilitation. Mechanism and Machine Theory, 2016, 103, 51-64.	4.5	99
119	Composite Learning Fuzzy Control of Uncertain Nonlinear Systems. International Journal of Fuzzy Systems, 2016, 18, 990-998.	4.0	14
120	Composite learning: An efficient way of parameter estimation in adaptive control. , 2016, , .		5
121	CREATION OF CLINICALLY-DIFFERENTIAL TUMOR MIMIC MODEL USING VASELINE-BASED MATERIALS WITH BARIUM SULFATE FOR THE VALIDATION OF REAL-TIME ULTRASOUND IMAGE-GUIDED LIVER BIOPSY SYSTEM. Biomedical Engineering - Applications, Basis and Communications, 2016, 28, 1650003.	0.6	0
122	A robotic knee exoskeleton for walking assistance and connectivity topology exploration in EEG signal. , 2016, , .		18
123	Unbalance detection to avoid falls with the use of a smart walker. , 2016, , .		4
124	Method based on bioinspired sample improves autofocusing performances. Optical Engineering, 2016, 55, 103103.	1.0	6
125	Robustness analysis of composite adaptive robot control. , 2016, , .		5
126	Model reference composite learning control without persistency of excitation. IET Control Theory and Applications, 2016, 10, 1963-1971.	2.1	37



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127	Biomimetic composite learning for robot motion control. , 2016, , .		3
128	Development of a novel robotic omni-directional hospital bed mover for patient transfer. , 2016, , .		3
129	Least-squares learning control with guaranteed parameter convergence. , 2016, , .		3
130	Region control for robots driven by series elastic actuators. , 2016, , .		0
131	An Acceleration-Based Robust Motion Controller Design for a Novel Series Elastic Actuator. IEEE Transactions on Industrial Electronics, 2016, 63, 1900-1910.	7.9	106
132	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.	2.8	19
133	Design of a Novel Flexible Endoscopeâ€”Cardioscope. Journal of Mechanisms and Robotics, 2016, 8, .	2.2	37
134	Composite Learning From Adaptive Dynamic Surface Control. IEEE Transactions on Automatic Control, 2016, 61, 2603-2609.	5.7	217
135	Modeling and simulations of three-dimensional laser imaging based on space-variant structure. Optics and Laser Technology, 2016, 78, 62-70.	4.6	11
136	Hybrid feedback feedforward: An efficient design of adaptive neural network control. Neural Networks, 2016, 76, 122-134.	5.9	103
137	A novel constrained wire-driven flexible mechanism and its kinematic analysis. Mechanism and Machine Theory, 2016, 95, 59-75.	4.5	98
138	Composite learning control with application to inverted pendulums. , 2015, , .		15
139	Robust position control of a novel series elastic actuator via disturbance observer. , 2015, , .		22
140	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.	4.7	82
141	Gait event-based human-robot synchrony for gait rehabilitation using adaptive oscillator. , 2015, , .		2
142	A novel gait phase-based control strategy for a portable knee-ankle-foot robot. , 2015, , .		9
143	Technical Note: Automatic real-time ultrasound tracking of respiratory signal using selective filtering and dynamic template matching. Medical Physics, 2015, 42, 4536-4541.	3.0	4
144	Effects of compliant and flexible trunks on peak-power of a lizard-inspired robot. , 2015, , .		3

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145	A linear actuator for precision positioning of dual objects. Smart Materials and Structures, 2015, 24, 125039.	3.5	18
146	A Practical Tuning Method for the Robust PID Controller with Velocity Feed-Back. Machines, 2015, 3, 208-222.	2.2	21
147	A novel tele-operated flexible surgical arm with optimal trajectory tracking aiming for minimally invasive neurosurgery. , 2015, , .		8
148	Mechanical Design and Evaluation of a Novel Knee-Ankle-Foot Robot for Rehabilitation. , 2015, , .		1
149	Composite learning from model reference adaptive fuzzy control. , 2015, , .		6
150	A novel constrained tendon-driven serpentine manipulator. , 2015, , .		17
151	Design and control of a novel compliant differential shape memory alloy actuator. Sensors and Actuators A: Physical, 2015, 225, 71-80.	4.1	79
152	Simplified adaptive neural control of strict-feedback nonlinear systems. Neurocomputing, 2015, 159, 251-256.	5.9	20
153	Shape reconstruction for wire-driven flexible robots based on BÃ©zier curve and electromagnetic positioning. Mechatronics, 2015, 29, 28-35.	3.3	71
154	Optimal teleoperation control of a constrained tendon-driven serpentine manipulator. , 2015, , .		6
155	Electromagnetic Positioning for Tip Tracking and Shape Sensing of Flexible Robots. IEEE Sensors Journal, 2015, 15, 4565-4575.	4.7	94
156	A nonlinear stability analysis for the robust position control problem of robot manipulators via disturbance observer. , 2015, , .		7
157	Dynamic surface control via singular perturbation analysis. Automatica, 2015, 57, 29-33.	5.0	85
158	Practical PID controller tuning for motion control. , 2015, , .		10
159	Peaking-Free Output-Feedback Adaptive Neural Control Under a Nonseparation Principle. IEEE Transactions on Neural Networks and Learning Systems, 2015, 26, 3097-3108.	11.3	27
160	Study on mathematic magnetic field model of rectangular coils for magnetic actuation. , 2015, , .		5
161	Development and evaluation of a novel overground robotic walker for pelvic motion support. , 2015, , .		13
162	Humanâ€“Robot Interaction Control of Rehabilitation Robots With Series Elastic Actuators. IEEE Transactions on Robotics, 2015, 31, 1089-1100.	10.3	270

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163	Single trial EEG classification of lower-limb movements using improved regularized common spatial pattern. , 2015, , .		5
164	Power analysis of a series elastic actuator for ankle joint gait rehabilitation. , 2015, , .		6
165	A review of long range piezoelectric motors using frequency leveraged method. Sensors and Actuators A: Physical, 2015, 235, 240-255.	4.1	131
166	Global Asymptotic Stabilization Using Adaptive Fuzzy PD Control. IEEE Transactions on Cybernetics, 2015, 45, 574-582.	9.5	24
167	Output Feedback Adaptive Neural Control Without Seeking SPR Condition. Asian Journal of Control, 2015, 17, 1620-1630.	3.0	11
168	Power Augmentation of Upper Extremity by Using Agonist Electromyography Signals Only for Extended Admittance Control. IEEJ Journal of Industry Applications, 2014, 3, 260-269.	1.1	11
169	Fast and low-frequency adaptation in neural network control. IET Control Theory and Applications, 2014, 8, 2062-2069.	2.1	12
170	Leader-Based Consensus of Heterogeneous Nonlinear Multiagent Systems. Mathematical Problems in Engineering, 2014, 2014, 1-6.	1.1	3
171	A Supine Gait Training Device for Stroke Rehabilitation1. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.7	6
172	A Portable Powered Knee-Ankle- Foot Orthosis1. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.7	4
173	A Wearable Posture Detection Device for Inpatient Healthcare1. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.7	0
174	Developing a Mobile Lower Limb Robotic Exoskeleton for Gait Rehabilitation. Journal of Medical Devices, Transactions of the ASME, 2014, 8, .	0.7	19
175	Depth estimation and object recognition in dark environments using ATIS. , 2014, , .		2
176	Biomimetic hybrid feedback feedforward adaptive neural control of robotic arms. , 2014, , .		7
177	EMG estimation from EEGs for constructing a power assist system. , 2014, , .		5
178	Statics modeling of an underactuated wire-driven flexible robotic arm. , 2014, , .		33
179	A brain-inspired spiking neural network model with temporal encoding and learning. Neurocomputing, 2014, 138, 3-13.	5.9	106
180	Gait event detection through neuromorphic spike sequence learning. , 2014, , .		16

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181	An Improved Magnetic Tracking Method Using Rotating Uniaxial Coil With Sparse Points and Closed Form Analytic Solution. IEEE Sensors Journal, 2014, 14, 3585-3592.	4.7	21
182	Adaptive Neural PD Control With Semiglobal Asymptotic Stabilization Guarantee. IEEE Transactions on Neural Networks and Learning Systems, 2014, 25, 2264-2274.	11.3	47
183	A preliminary study on mathematic modeling of annular magnets in magnetic tracking systems. , 2014, , .		1
184	Machine health condition prediction via online dynamic fuzzy neural networks. Engineering Applications of Artificial Intelligence, 2014, 35, 105-113.	8.1	67
185	Power assistance of an omnidirectional hybrid walker and wheelchair with admittance model and Iterative Learning Control. , 2014, , .		2
186	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.	2.1	90
187	Self-Contained Pedestrian Tracking During Normal Walking Using an Inertial/Magnetic Sensor Module. IEEE Transactions on Biomedical Engineering, 2014, 61, 892-899.	4.2	40
188	Design of a novel robotic over-ground walking device for gait rehabilitation. , 2014, , .		14
189	A Dynamic Liver Phantom for Ultrasound Image Guided Biopsy. IFMBE Proceedings, 2014, , 152-155.	0.3	3
190	Intelligent fault monitoring and diagnosis in electrical machines. Measurement: Journal of the International Measurement Confederation, 2013, 46, 3640-3646.	5.0	20
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