

Haoyong Yu

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

194
papers

4,498
citations

39
h-index

61
g-index

223
ext. papers

5,739
ext. citations

4
avg, IF

6.4
L-index

| # | Paper | IF | Citations |
|-----|--|-----|-----------|
| 194 | Toward Gait Symmetry Enhancement via a Cable-Driven Exoskeleton Powered by Series Elastic Actuators. <i>IEEE Robotics and Automation Letters</i> , 2022 , 7, 786-793 | 4.2 | 8 |
| 193 | Gait Phase Subdivision and Leg Stiffness Estimation During Stair Climbing.. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2022 , 30, 860-868 | 4.8 | |
| 192 | Indirect adaptive control of multi-input-multi-output nonlinear singularly perturbed systems with model uncertainties. <i>Neurocomputing</i> , 2022 , 491, 104-116 | 5.4 | |
| 191 | Predictive Locomotion Mode Recognition and Accurate Gait Phase Estimation for Hip Exoskeleton on Various Terrains. <i>IEEE Robotics and Automation Letters</i> , 2022 , 1-1 | 4.2 | 4 |
| 190 | Design and Study of Scissor-Mechanism-Based Pneumatic Actuator With a Characteristic of Bidirectional Contraction. <i>IEEE/ASME Transactions on Mechatronics</i> , 2022 , 1-9 | 5.5 | 0 |
| 189 | Sensorless Control for Unsymmetrical Bistable Multi-magnetic Circuit Permanent Magnet Actuator Based on High-frequency Signal Injection and High Pass Filter Circuit. <i>IEEE Transactions on Industrial Electronics</i> , 2021 , 1-1 | 8.9 | |
| 188 | Adaptive Fuzzy Inverse Optimal Fixed-Time Control of Uncertain Nonlinear Systems. <i>IEEE Transactions on Fuzzy Systems</i> , 2021 , 1-1 | 8.3 | 0 |
| 187 | Task-related brain functional network reconfigurations relate to motor recovery in chronic subcortical stroke. <i>Scientific Reports</i> , 2021 , 11, 8442 | 4.9 | 4 |
| 186 | Fully Distributed Cooperative Circumnavigation of Networked Unmanned Aerial Vehicles. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021 , 26, 709-718 | 5.5 | 2 |
| 185 | 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 | 6.5 | 9 |
| 184 | Stability Analysis for Input Saturated Discrete-Time Switched Systems With Average Dwell-Time. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2021 , 51, 412-419 | 7.3 | 7 |
| 183 | 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 | 6 |
| 182 | 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 | 7.8 | 14 |
| 181 | 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 | 5.5 | 4 |
| 180 | . <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2021 , 1-14 | 7.3 | 15 |
| 179 | Investigation on a New Approach for Designing Articulated Soft Robots with Discrete Variable Stiffness. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021 , 1-1 | 5.5 | 2 |
| 178 | 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 | 2.9 | 3 |

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|-----|--|------|----|
| 177 | Hysteresis modeling and compensation of a rotary series elastic actuator with nonlinear stiffness. <i>Review of Scientific Instruments</i> , 2021 , 92, 095005 | 1.7 | |
| 176 | Time-Synchronized Control for Disturbed Systems. <i>IEEE Transactions on Cybernetics</i> , 2021 , PP, | 10.2 | 2 |
| 175 | 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 | 14 |
| 174 | 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 | 9 |
| 173 | A novel piezo-actuated flapping mechanism based on inertia drive. <i>Journal of Intelligent Material Systems and Structures</i> , 2020 , 31, 1782-1792 | 2.3 | 1 |
| 172 | On performance recovery of robust dynamic surface control. <i>International Journal of Robust and Nonlinear Control</i> , 2020 , 30, 3094-3109 | 3.6 | 2 |
| 171 | An Omnidirectional Assistive Platform Integrated With Functional Electrical Stimulation for Gait Rehabilitation: A Case Study. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2020 , 28, 710-719 | 4.8 | 1 |
| 170 | Unknown System Dynamics Estimator for Nonlinear Uncertain Systems. <i>IFAC-PapersOnLine</i> , 2020 , 53, 554-559 | 0.7 | 1 |
| 169 | Non-linear-disturbance-observer-enhanced MPC for motion control systems with multiple disturbances. <i>IET Control Theory and Applications</i> , 2020 , 14, 63-72 | 2.5 | 10 |
| 168 | Degeneration of structural brain networks is associated with cognitive decline after ischaemic stroke. <i>Brain Communications</i> , 2020 , 2, fcaa155 | 4.5 | 4 |
| 167 | A Novel Articulated Soft Robot Capable of Variable Stiffness through Bistable Structure 2020 , | | 3 |
| 166 | A Sliding Mode Force and Position Controller Synthesis for Series Elastic Actuators. <i>Robotica</i> , 2020 , 38, 15-28 | 2.1 | 6 |
| 165 | Composite learning control of robotic systems: A least squares modulated approach. <i>Automatica</i> , 2020 , 111, 108612 | 5.7 | 32 |
| 164 | Academic Review and Perspectives on Robotic Exoskeletons. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2019 , 27, 2294-2304 | 4.8 | 42 |
| 163 | High mobility control of an omnidirectional platform for gait rehabilitation after stroke. <i>IEEE International Conference on Rehabilitation Robotics</i> , 2019 , 2019, 694-700 | 1.3 | 1 |
| 162 | Algorithmic Resolution of Multiple Impacts in Nonsmooth Mechanical Systems with Switching Constraints 2019 , | | 2 |
| 161 | Phase-Synchronized Assistive Torque Control for the Correction of Kinematic Anomalies in the Gait Cycle. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2019 , 27, 2305-2314 | 4.8 | 6 |
| 160 | Composite learning adaptive backstepping control using neural networks with compact supports. <i>International Journal of Adaptive Control and Signal Processing</i> , 2019 , 33, 1726-1738 | 2.8 | 5 |

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|-----|---|------|----|
| 159 | On parameter convergence in least squares identification and adaptive control. <i>International Journal of Robust and Nonlinear Control</i> , 2019 , 29, 2898-2911 | 3.6 | 19 |
| 158 | Efficient learning from adaptive control under sufficient excitation. <i>International Journal of Robust and Nonlinear Control</i> , 2019 , 29, 3111-3124 | 3.6 | 8 |
| 157 | What Are Spectral and Spatial Distributions of EEG-EMG Correlations in Overground Walking? An Exploratory Study. <i>IEEE Access</i> , 2019 , 7, 143935-143946 | 3.5 | 6 |
| 156 | An Integrated Robotic Mobile Platform and Functional Electrical Stimulation System for Gait Rehabilitation Post-Stroke. <i>Biosystems and Biorobotics</i> , 2019 , 425-429 | 0.2 | 1 |
| 155 | Exoskeleton Control for Post-stroke Gait Training of a Paretic Limb Based on Extraction of the Contralateral Gait Phase. <i>Biosystems and Biorobotics</i> , 2019 , 294-298 | 0.2 | 2 |
| 154 | Enhanced parameter estimation in adaptive control via online historical data. <i>IET Control Theory and Applications</i> , 2019 , 13, 2710-2716 | 2.5 | 2 |
| 153 | Modeling and Experimental Verification of a Dual-slider Piezo-actuated Linear Motor. <i>Instruments and Experimental Techniques</i> , 2019 , 62, 876-880 | 0.5 | 2 |
| 152 | Composite Learning Robot Control With Friction Compensation: A Neural Network-Based Approach. <i>IEEE Transactions on Industrial Electronics</i> , 2019 , 66, 7841-7851 | 8.9 | 62 |
| 151 | Global Dynamic Nonrecursive Realization of Decentralized Nonsmooth Exact Tracking for Large-Scale Interconnected Nonlinear Systems. <i>IEEE Transactions on Cybernetics</i> , 2019 , 49, 3521-3531 | 10.2 | 3 |
| 150 | Identification and Control of Nonlinear Systems Using Neural Networks: A Singularity-Free Approach. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2019 , 30, 2696-2706 | 10.3 | 13 |
| 149 | . <i>IEEE Transactions on Industrial Electronics</i> , 2019 , 66, 5374-5382 | 8.9 | 79 |
| 148 | Robust Sliding Mode Control for Robots Driven by Compliant Actuators. <i>IEEE Transactions on Control Systems Technology</i> , 2019 , 27, 1259-1266 | 4.8 | 47 |
| 147 | Efficient PID Tracking Control of Robotic Manipulators Driven by Compliant Actuators. <i>IEEE Transactions on Control Systems Technology</i> , 2019 , 27, 915-922 | 4.8 | 66 |
| 146 | Feature Extraction of Shoulder Joint's Voluntary Flexion-Extension Movement Based on Electroencephalography Signals for Power Assistance. <i>Bioengineering</i> , 2018 , 6, | 5.3 | 3 |
| 145 | Generalized Dynamic Predictive Control for Nonparametric Uncertain Systems With Application to Series Elastic Actuators. <i>IEEE Transactions on Industrial Informatics</i> , 2018 , 14, 4829-4840 | 11.9 | 14 |
| 144 | Discussions on Smooth Modifications of Integral Sliding Mode Control. <i>International Journal of Control, Automation and Systems</i> , 2018 , 16, 586-593 | 2.9 | 8 |
| 143 | Practically Oriented Finite-Time Control Design and Implementation: Application to a Series Elastic Actuator. <i>IEEE Transactions on Industrial Electronics</i> , 2018 , 65, 4166-4176 | 8.9 | 37 |
| 142 | Composite learning robot control with guaranteed parameter convergence. <i>Automatica</i> , 2018 , 89, 398-406 | | 82 |

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| 141 | . <i>IEEE/ASME Transactions on Mechatronics</i> , 2018 , 23, 769-780 | 5.5 | 87 |
| 140 | Iterative learning impedance control for rehabilitation robots driven by series elastic actuators. <i>Automatica</i> , 2018 , 90, 1-7 | 5.7 | 64 |
| 139 | Toward a Transform Method From Lighthill Fish Swimming Model to Biomimetic Robot Fish. <i>IEEE Robotics and Automation Letters</i> , 2018 , 3, 2632-2639 | 4.2 | 14 |
| 138 | Hybrid FES robotic gait rehabilitation technologies: a review on mechanical design, actuation, and control strategies. <i>International Journal of Intelligent Robotics and Applications</i> , 2018 , 2, 1-28 | 1.7 | 19 |
| 137 | A Nonsmooth Composite Control Design Framework for Nonlinear Systems With Mismatched Disturbances: Algorithms and Experimental Tests. <i>IEEE Transactions on Industrial Electronics</i> , 2018 , 65, 8828-8839 | 8.9 | 30 |
| 136 | Continuous Tracking Control for a Compliant Actuator With Two-Stage Stiffness. <i>IEEE Transactions on Automation Science and Engineering</i> , 2018 , 15, 57-66 | 4.9 | 15 |
| 135 | Subject-specific and respiration-corrected 4D liver model from real-time ultrasound image sequences. <i>Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization</i> , 2018 , 6, 7-16 | 0.9 | 1 |
| 134 | Robust model predictive control for constrained continuous-time nonlinear systems. <i>International Journal of Control</i> , 2018 , 91, 359-368 | 1.5 | 29 |
| 133 | Adaptive Command-Filtered Backstepping Control of Robot Arms With Compliant Actuators. <i>IEEE Transactions on Control Systems Technology</i> , 2018 , 26, 1149-1156 | 4.8 | 84 |
| 132 | . <i>IEEE Transactions on Industrial Informatics</i> , 2018 , 14, 3087-3096 | 11.9 | 115 |
| 131 | New Approach to Fixed-Order Output-Feedback Control for Piecewise-Affine Systems. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2018 , 65, 2961-2969 | 3.9 | 30 |
| 130 | Adaptive Impedance Control for Compliantly Actuated Robots with a Unified Safety Measure 2018 , | | 1 |
| 129 | Design and Model Analysis of a Robotic Joint with Circular Electro-hydraulic Actuator 2018 , | | 1 |
| 128 | A Novel Precision Measuring Parallel Mechanism for the Closed-Loop Control of a Biologically Inspired Lower Limb Exoskeleton. <i>IEEE/ASME Transactions on Mechatronics</i> , 2018 , 23, 2693-2703 | 5.5 | 19 |
| 127 | Continuous sliding mode control of compliant robot arms: A singularly perturbed approach. <i>Mechatronics</i> , 2018 , 52, 127-134 | 3 | 34 |
| 126 | A Study on Kinematic Pattern of Fish Undulatory Locomotion Using a Robot Fish. <i>Journal of Mechanisms and Robotics</i> , 2018 , 10, | 2.2 | 7 |
| 125 | Design and Evaluation of a Motorized Robotic Bed Mover With Omnidirectional Mobility for Patient Transportation. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2018 , 22, 1775-1785 | 7.2 | 6 |
| 124 | A quantitative evaluation function for 3D tree-like structure segmentations in liver images. <i>Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization</i> , 2017 , 5, 45-53 ^{0.9} | | |

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| 123 | A piezo-driven flapping wing mechanism for micro air vehicles. <i>Microsystem Technologies</i> , 2017 , 23, 967-973 | 14 |
| 122 | Biomimetic Hybrid Feedback Feedforward Neural-Network Learning Control. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2017 , 28, 1481-1487 | 10.3 87 |
| 121 | Output-Feedback Adaptive Neural Control of a Compliant Differential SMA Actuator. <i>IEEE Transactions on Control Systems Technology</i> , 2017 , 25, 2202-2210 | 4.8 31 |
| 120 | Multi-modal control scheme for rehabilitation robotic exoskeletons. <i>International Journal of Robotics Research</i> , 2017 , 36, 759-777 | 5.7 47 |
| 119 | Gait-Event-Based Synchronization Method for Gait Rehabilitation Robots via a Bioinspired Adaptive Oscillator. <i>IEEE Transactions on Biomedical Engineering</i> , 2017 , 64, 1345-1356 | 5 25 |
| 118 | Experimental evaluation of a novel robotic hospital bed mover with omni-directional mobility. <i>Applied Ergonomics</i> , 2017 , 65, 389-397 | 4.2 12 |
| 117 | Resistance training using a novel robotic walker for over-ground gait rehabilitation: a preliminary study on healthy subjects. <i>Medical and Biological Engineering and Computing</i> , 2017 , 55, 1873-1881 | 3.1 9 |
| 116 | Adaptive Human-Robot Interaction Control for Robots Driven by Series Elastic Actuators. <i>IEEE Transactions on Robotics</i> , 2017 , 33, 169-182 | 6.5 97 |
| 115 | Composite learning from adaptive backstepping neural network control. <i>Neural Networks</i> , 2017 , 95, 1349-142 | 68 |
| 114 | A sliding mode controller design for the robust position control problem of series elastic actuators 2017 , | 2 |
| 113 | Design of an SSVEP-based BCI system with visual servo module for a service robot to execute multiple tasks 2017 , | 4 |
| 112 | A Unified Robust Motion Controller Design for Series Elastic Actuators. <i>IEEE/ASME Transactions on Mechatronics</i> , 2017 , 22, 2229-2240 | 5.5 27 |
| 111 | Design and experimental validation of a linear piezoelectric micromotor for dual-slider positioning. <i>Microsystem Technologies</i> , 2017 , 23, 2363-2370 | 1.7 3 |
| 110 | Adaptive fuzzy PD control with stable H _∞ tracking guarantee. <i>Neurocomputing</i> , 2017 , 237, 71-78 | 5.4 27 |
| 109 | Biomechanical effects of body weight support with a novel robotic walker for over-ground gait rehabilitation. <i>Medical and Biological Engineering and Computing</i> , 2017 , 55, 315-326 | 3.1 14 |
| 108 | Kinematic comparison of surgical tendon-driven manipulators and concentric tube manipulators. <i>Mechanism and Machine Theory</i> , 2017 , 107, 148-165 | 4 95 |
| 107 | A robust force controller design for series elastic actuators 2017 , | 2 |
| 106 | Biomechanical effects of robot assisted walking on knee joint kinematics and muscle activation pattern. <i>IEEE International Conference on Rehabilitation Robotics</i> , 2017 , 2017, 252-257 | 1.3 1 |

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|-----|---|-----|-----|
| 105 | Identification of gait-related brain activity using electroencephalographic signals 2017 , | | 5 |
| 104 | A Novel De-Noising Method for Improving the Performance of Full-Waveform LiDAR Using Differential Optical Path. <i>Remote Sensing</i> , 2017 , 9, 1109 | 5 | 13 |
| 103 | Adaptive-Oscillator-Based Control Strategy for Gait Rehabilitation Robots. <i>Biosystems and Biorobotics</i> , 2017 , 1365-1369 | 0.2 | 1 |
| 102 | Adaptive Neural Network Control for Constrained Robot Manipulators. <i>Lecture Notes in Computer Science</i> , 2017 , 118-127 | 0.9 | 3 |
| 101 | A novel constrained wire-driven flexible mechanism and its kinematic analysis. <i>Mechanism and Machine Theory</i> , 2016 , 95, 59-75 | 4 | 74 |
| 100 | Robustness analysis of composite adaptive robot control 2016 , | | 4 |
| 99 | Model reference composite learning control without persistency of excitation. <i>IET Control Theory and Applications</i> , 2016 , 10, 1963-1971 | 2.5 | 28 |
| 98 | Biomimetic composite learning for robot motion control 2016 , | | 2 |
| 97 | Development of a novel robotic omni-directional hospital bed mover for patient transfer 2016 , | | 1 |
| 96 | Least-squares learning control with guaranteed parameter convergence 2016 , | | 2 |
| 95 | . <i>IEEE Transactions on Industrial Electronics</i> , 2016 , 63, 1900-1910 | 8.9 | 73 |
| 94 | Restriction of pelvic lateral and rotational motions alters lower limb kinematics and muscle activation pattern during over-ground walking. <i>Medical and Biological Engineering and Computing</i> , 2016 , 54, 1621-1629 | 3.1 | 14 |
| 93 | Design of a Novel Flexible EndoscopeCardioscope. <i>Journal of Mechanisms and Robotics</i> , 2016 , 8, 051014 | 2.2 | 33 |
| 92 | Composite Learning From Adaptive Dynamic Surface Control. <i>IEEE Transactions on Automatic Control</i> , 2016 , 61, 2603-2609 | 5.9 | 163 |
| 91 | Modeling and simulations of three-dimensional laser imaging based on space-variant structure. <i>Optics and Laser Technology</i> , 2016 , 78, 62-70 | 4.2 | 8 |
| 90 | Hybrid feedback feedforward: An efficient design of adaptive neural network control. <i>Neural Networks</i> , 2016 , 76, 122-134 | 9.1 | 88 |
| 89 | Composite adaptive dynamic surface control using online recorded data. <i>International Journal of Robust and Nonlinear Control</i> , 2016 , 26, 3921-3936 | 3.6 | 58 |
| 88 | Online data-driven composite adaptive backstepping control with exact differentiators. <i>International Journal of Adaptive Control and Signal Processing</i> , 2016 , 30, 779-789 | 2.8 | 18 |

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|----|--|------|----|
| 87 | Development of a human computer interaction system based on multi-modal gaze tracking methods 2016 , | | 4 |
| 86 | An intelligent technique for posture and fall detection using multiscale entropy analysis and fuzzy logic 2016 , | | 2 |
| 85 | An Active Disturbance Rejection controller design for the robust position control of Series Elastic Actuators 2016 , | | 4 |
| 84 | Mechanical design and evaluation of a compact portable knee-ankle-foot robot for gait rehabilitation. <i>Mechanism and Machine Theory</i> , 2016 , 103, 51-64 | 4 | 65 |
| 83 | Composite Learning Fuzzy Control of Uncertain Nonlinear Systems. <i>International Journal of Fuzzy Systems</i> , 2016 , 18, 990-998 | 3.6 | 11 |
| 82 | Composite learning: An efficient way of parameter estimation in adaptive control 2016 , | | 4 |
| 81 | 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. <i>Biomedical Engineering - Applications, Basis and Communications</i> , 2016 , 28, 1650003 | 0.6 | |
| 80 | A robotic knee exoskeleton for walking assistance and connectivity topology exploration in EEG signal 2016 , | | 12 |
| 79 | Unbalance detection to avoid falls with the use of a smart walker 2016 , | | 3 |
| 78 | Method based on bioinspired sample improves autofocusing performances. <i>Optical Engineering</i> , 2016 , 55, 103103 | 1.1 | 4 |
| 77 | Simplified adaptive neural control of strict-feedback nonlinear systems. <i>Neurocomputing</i> , 2015 , 159, 251-256 | 5.4 | 16 |
| 76 | Shape reconstruction for wire-driven flexible robots based on Bézier curve and electromagnetic positioning. <i>Mechatronics</i> , 2015 , 29, 28-35 | 3 | 54 |
| 75 | Optimal teleoperation control of a constrained tendon-driven serpentine manipulator 2015 , | | 5 |
| 74 | Electromagnetic Positioning for Tip Tracking and Shape Sensing of Flexible Robots. <i>IEEE Sensors Journal</i> , 2015 , 15, 4565-4575 | 4 | 63 |
| 73 | 2015 , | | 4 |
| 72 | Dynamic surface control via singular perturbation analysis. <i>Automatica</i> , 2015 , 57, 29-33 | 5.7 | 68 |
| 71 | Practical PID controller tuning for motion control 2015 , | | 5 |
| 70 | Peaking-Free Output-Feedback Adaptive Neural Control Under a Nonseparation Principle. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2015 , 26, 3097-108 | 10.3 | 24 |

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|----|---|------|-----|
| 69 | Study on mathematic magnetic field model of rectangular coils for magnetic actuation 2015, | | 2 |
| 68 | Development and evaluation of a novel overground robotic walker for pelvic motion support 2015, | | 7 |
| 67 | HumanRobot Interaction Control of Rehabilitation Robots With Series Elastic Actuators. <i>IEEE Transactions on Robotics</i> , 2015 , 31, 1089-1100 | 6.5 | 177 |
| 66 | Single trial EEG classification of lower-limb movements using improved regularized common spatial pattern 2015, | | 4 |
| 65 | Power analysis of a series elastic actuator for ankle joint gait rehabilitation 2015, | | 5 |
| 64 | A review of long range piezoelectric motors using frequency leveraged method. <i>Sensors and Actuators A: Physical</i> , 2015 , 235, 240-255 | 3.9 | 101 |
| 63 | Global asymptotic stabilization using adaptive fuzzy PD control. <i>IEEE Transactions on Cybernetics</i> , 2015 , 45, 588-96 | 10.2 | 21 |
| 62 | Output Feedback Adaptive Neural Control Without Seeking SPR Condition. <i>Asian Journal of Control</i> , 2015 , 17, 1620-1630 | 1.7 | 10 |
| 61 | Composite learning control with application to inverted pendulums 2015, | | 8 |
| 60 | 2015, | | 18 |
| 59 | Real-Time Shape Estimation for Wire-Driven Flexible Robots With Multiple Bending Sections Based on Quadratic Bézier Curves. <i>IEEE Sensors Journal</i> , 2015 , 15, 6326-6334 | 4 | 50 |
| 58 | Gait event-based human-robot synchrony for gait rehabilitation using adaptive oscillator 2015, | | 2 |
| 57 | A novel gait phase-based control strategy for a portable knee-ankle-foot robot 2015, | | 4 |
| 56 | Technical Note: Automatic real-time ultrasound tracking of respiratory signal using selective filtering and dynamic template matching. <i>Medical Physics</i> , 2015 , 42, 4536-41 | 4.4 | 4 |
| 55 | Effects of compliant and flexible trunks on peak-power of a lizard-inspired robot 2015, | | 3 |
| 54 | A linear actuator for precision positioning of dual objects. <i>Smart Materials and Structures</i> , 2015 , 24, 125039 | 3.9 | 15 |
| 53 | A Practical Tuning Method for the Robust PID Controller with Velocity Feed-Back. <i>Machines</i> , 2015 , 3, 208-222 | 2.9 | 9 |
| 52 | A novel tele-operated flexible surgical arm with optimal trajectory tracking aiming for minimally invasive neurosurgery 2015, | | 8 |

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|----|---|------|----|
| 51 | Composite learning from model reference adaptive fuzzy control 2015 , | | 5 |
| 50 | A novel constrained tendon-driven serpentine manipulator 2015 , | | 13 |
| 49 | Design and control of a novel compliant differential shape memory alloy actuator. <i>Sensors and Actuators A: Physical</i> , 2015 , 225, 71-80 | 3.9 | 55 |
| 48 | A brain-inspired spiking neural network model with temporal encoding and learning. <i>Neurocomputing</i> , 2014 , 138, 3-13 | 5.4 | 72 |
| 47 | Gait event detection through neuromorphic spike sequence learning 2014 , | | 15 |
| 46 | An Improved Magnetic Tracking Method Using Rotating Uniaxial Coil With Sparse Points and Closed Form Analytic Solution. <i>IEEE Sensors Journal</i> , 2014 , 14, 3585-3592 | 4 | 18 |
| 45 | Adaptive neural PD control with semiglobal asymptotic stabilization guarantee. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2014 , 25, 2264-74 | 10.3 | 39 |
| 44 | A preliminary study on mathematic modeling of annular magnets in magnetic tracking systems 2014 , | | 1 |
| 43 | Machine health condition prediction via online dynamic fuzzy neural networks. <i>Engineering Applications of Artificial Intelligence</i> , 2014 , 35, 105-113 | 7.2 | 51 |
| 42 | 6-D Magnetic Localization and Orientation Method for an Annular Magnet Based on a Closed-Form Analytical Model. <i>IEEE Transactions on Magnetics</i> , 2014 , 50, 1-11 | 2 | 58 |
| 41 | Self-contained pedestrian tracking during normal walking using an inertial/magnetic sensor module. <i>IEEE Transactions on Biomedical Engineering</i> , 2014 , 61, 892-9 | 5 | 36 |
| 40 | Design of a novel robotic over-ground walking device for gait rehabilitation 2014 , | | 12 |
| 39 | Power Augmentation of Upper Extremity by Using Agonist Electromyography Signals Only for Extended Admittance Control. <i>IEEJ Journal of Industry Applications</i> , 2014 , 3, 260-269 | 0.7 | 6 |
| 38 | Fast and low-frequency adaptation in neural network control. <i>IET Control Theory and Applications</i> , 2014 , 8, 2062-2069 | 2.5 | 10 |
| 37 | Leader-Based Consensus of Heterogeneous Nonlinear Multiagent Systems. <i>Mathematical Problems in Engineering</i> , 2014 , 2014, 1-6 | 1.1 | 1 |
| 36 | A Supine Gait Training Device for Stroke Rehabilitation1. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2014 , 8, | 1.3 | 5 |
| 35 | A Portable Powered Knee-Ankle- Foot Orthosis1. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2014 , 8, | 1.3 | 3 |
| 34 | Developing a Mobile Lower Limb Robotic Exoskeleton for Gait Rehabilitation. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2014 , 8, | 1.3 | 16 |

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|----|---|-----|-----|
| 33 | 2014, | | 5 |
| 32 | EMG estimation from EEGs for constructing a power assist system 2014, | | 2 |
| 31 | Statics modeling of an underactuated wire-driven flexible robotic arm 2014, | | 26 |
| 30 | Supine Gait Training Device for Stroke Rehabilitation - Design of a Compliant Ankle Orthosis. <i>IFMBE Proceedings</i> , 2014 , 512-515 | 0.2 | 2 |
| 29 | A Dynamic Liver Phantom for Ultrasound Image Guided Biopsy. <i>IFMBE Proceedings</i> , 2014 , 152-155 | 0.2 | 2 |
| 28 | Intelligent fault monitoring and diagnosis in electrical machines. <i>Measurement: Journal of the International Measurement Confederation</i> , 2013 , 46, 3640-3646 | 4.6 | 18 |
| 27 | Fast and robust extraction of surrogate respiratory signal from intra-operative liver ultrasound images. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2013 , 8, 1027-35 | 3.9 | 7 |
| 26 | Bipedal locomotion modeled as the central pattern generator (CPG) and regulated by self organizing map for model of cortex 2013, | | 1 |
| 25 | Control design of a novel compliant actuator for rehabilitation robots. <i>Mechatronics</i> , 2013 , 23, 1072-1083 | | 70 |
| 24 | Novel automatic posture detection for in-patient care using IMU sensors 2013, | | 3 |
| 23 | A novel compact compliant actuator design for rehabilitation robots. <i>IEEE International Conference on Rehabilitation Robotics</i> , 2013 , 2013, 6650478 | 1.3 | 5 |
| 22 | Gait phase detection in able-bodied subjects and dementia patients. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 4907-10 | 0.9 | 8 |
| 21 | Mechanical design of a portable knee-ankle-foot robot 2013, | | 27 |
| 20 | Design of a novel compliant differential Shape Memory Alloy actuator 2013, | | 3 |
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