

Abstract--This paper proposes a human-assisting manipulator teleoperated by electromyographic (EMG) signals and arm motions. The proposed method can realize a new master-slave ...

According to an energy-storage type stair walking assisting mechanism, stair handrails are used as rails, a walking aid is installed on a handrail of every flight of steps, a user can hold and lean ...

Aiming at the method of using energy storage hydraulic cylinders to coordinate the lifting of the heavy manipulators to realize the gravitational potential energy recovery and utilization, the ...

A passive energy-storage exoskeleton for assisting elbow joint is provided, which includes an upper arm unit, a lower arm unit, and an elbow joint unit located therebetween, the upper arm ...

This paper investigates feasibility of using a flywheel based energy recovery and storage system for a robotic manipulator. The incentive is supported by ever growing necessity for efficient ...

Abstract Coupling energy storage system is one of the potential ways to improve the peak regulation and frequency modulation performance for the existing combined heat power plant. ...

Polymer based dielectric film capacitors with enhanced energy density and high temperature resistance are urgently required to replace the general used biaxially oriented polypropylene ...

A hip-knee joint, energy storage technology, applied in passive exercise equipment, equipment to help people walk, physical therapy, etc. Power assistance and other issues, to achieve the ...

LiHub All-in-One Industrial and Commercial Energy Storage System is a beautifully designed, turn-key solution energy storage system. Within the IP54 protected cabinet consists of built-in ...

The development of aqueous Zn-based energy storage devices is severely restricted by uncontrollable Zn dendrite growth, serious parasitic side-reactions, and poor low-temperature ...

A variable stiffness and hip joint technology, applied in the field of passive variable stiffness energy storage to assist hip exoskeletons, can solve the problems of late start, restricting the ...

Hence, it is a meaningful topic to evaluate the advantage of integrated battery energy storage systems for assisting hydropower units (HPUs) in frequency regulation. First, the frequency ...



Assisting manipulator energy storage