
In this paper, a novel series hybrid hydraulic excavator based on electro-hydraulic composite energy storage, which provides the average power of the system through the diesel engine, ...

Energy recovery and regeneration comprise an effective way to improve hydraulic excavator fuel economy. This paper proposes a novel electro-hydraulic energy-saving system ...

In this research, the structure of an electro-hydraulic hybrid vehicle (EHHV) is classified, compared and discussed. The application of existing EHHVs is studied.

The force density of present day electro-magnetic mechanical actuators is low and there is a need for electro-hydraulic components which can supply the required power to ...

Ludington Pumped Storage Power Plant in Michigan on Lake Michigan Pumped-storage hydroelectricity (PSH), or pumped hydroelectric energy ...

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Electro-hydraulic strategies for various vehicle types and engineering machinery are reviewed.

The present study focuses on the dynamic electro-thermal modeling for the all-vanadium redox flow battery (VRB) with forced cooling strategies. The Fo...

This paper proposes a novel hydraulic energy storage component (NHESC) that integrates hybrid energy storage through the ...

Energy storage is the capture of energy produced at one time for use at a later time [1] to reduce imbalances between energy demand and energy production. A device that stores energy is ...

A CLOSED CIRCUIT ELECTRO-HYDRAULIC ACTUATOR WITH ENERGY RECUPERATION CAPABILITY Shaoyang Qu 1*, David ...

Here, we introduce a strategy of flexible electro-hydraulic power chips that enables multi-circuit independent pumping and control of soft systems in simple, compact, and ...

To achieve energy saving, a parallel electro-hydraulic hybrid drivetrain that combines an electric-hydraulic energy recovery system with a valve-controlled system is ...

Abstract Energy recovery and regeneration comprise an effective way to improve hydraulic excavator fuel economy. This paper proposes a novel electro-hydraulic energy ...

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