

عنوان مقاله:

Power Control Strategy of Fuel Cell Hybrid Electric Vehicles

محل انتشار:

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نویسنده:

Amin Hajizadeh - Department of Electrical and Robotic Engineering, Shahrood University of Technology, Shahrood, Iran

خلاصه مقاله:

This paper deals a novel strategy developed for optimizing the power flow in a Fuel Cell Hybrid Electric Vehicle (FCHEV) structure. This method implemented an on-line power management by a fuzzy controller between dual power sources that consist of a battery bank and a Fuel Cell (FC). This structure included battery and fuel cell and its power train system include an Electric Motor (EM). The proposed method involves an advance supervisory controller in the first layer which included all of possible operation modes. With regards the operation mode, the upper layer make decision to choose the switching chain roles and respect controller in the second layer. Finally in the third layer, there are local controller to regulate the set points of each subsystems to reach the best performance and acceptable operation indexes. Simulation results of a test system illustrate improvement in the operation efficiency of the hybrid .power system and the battery state of charge has been maintained at a reasonable level

کلمات کلیدی:

Fuel Cell Hybrid Electric Vehicle, Fuzzy Controller, Power Management

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