

عنوان مقاله:

Multi Objective Optimization for the Combination of PV, Batt&SOFC

محل انتشار:

چهارمین کنفرانس سالانه انرژی پاک (سال: 1393)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

Purpose of this study is optimization of the combination of PV panels, batteries and a solid oxide fuel cell by a multiobjective optimization evolutionary algorithm (PESA). Thiswork compares the use of different fuels for SOFC in the hybrid system. Results are compared to specify better fuel for SOFC from economical and ecological point of view. Optimization is done for two categories of fuel price: international fuel prices and Iran fuel prices. Also the effect ofchange in power of SOFC is examined to determine enough auxiliary power for this hybrid system. If the angle of panelcan change, PV panel productivity increases and required auxiliary power decreases. So, annualized cost and .emission are reduced. In this study the effect of monthly change of panel angle is considered

کلمات کلیدی:

Optimization; SOFC; photovoltaic; hybrid system

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https://civilica.com/doc/280338

