عنوان مقاله:

Modelling and Control of a Photovoltaic Cell Connected to a Three-Level Inverter on Grid

محل انتشار:

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خلاصه مقاله:

Nowadays , the green energies have attracted a considerable attention in real life . One of the important and useful cases , is the solar energy . In sunny regions , such energy sources are more important than fossil sources . However , as a main defection of such apparatus , the variation of the output voltage due to the weather and load conditions , should be regulated . Therefore , a control system that can stabilize the state of this configuration , is necessary . In this paper , a state feedback is utilized to regulate the voltage output . Simple structure and implementation are the main properties of such control system . In this way , an optimal LQR and a suboptimal control have been designed . Simulating these control systems for some real parameters show the effectiveness of the proposed methods

کلمات کلیدی:

Photovoltaic cell; state feedback control; LQR; three level inverter

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