

عنوان مقاله:

A Transformerless Quadratic Boost Converter with Continuous Input Current Based on Cuk converter

محل انتشار:

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نویسندگان:

Saeed Mahdizadeh - Shahid Beheshti University, Faculty of the Electrical Engineering

Hossein Gholizadeh - Shahid Beheshti University, Faculty of the Electrical Engineering

Ebrahim Afjei - Shahid Beheshti University, Faculty of the Electrical Engineering

خلاصه مقاله:

A transformerless quadratic boost converter has been proposed in this paper. The high voltage ratio besides the continuity of the input current, has made it suitable for renewable applications. The operation modes and detailed parameters and relations have been expressed. To prove the better function of the proposed converter, it has been compared with conventional boost converter and other high step-up converters. The non-ideal voltage ratio of the proposed converter has been extracted and compared with conventional boost converter and other high gains. In the end, the simulation results have been extracted by PLECS and the simulation results have been compared theoretical relations.

کلمات کلیدی:

Continuous input current, DC-DC converter, high step-up converter, transformerless converter

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