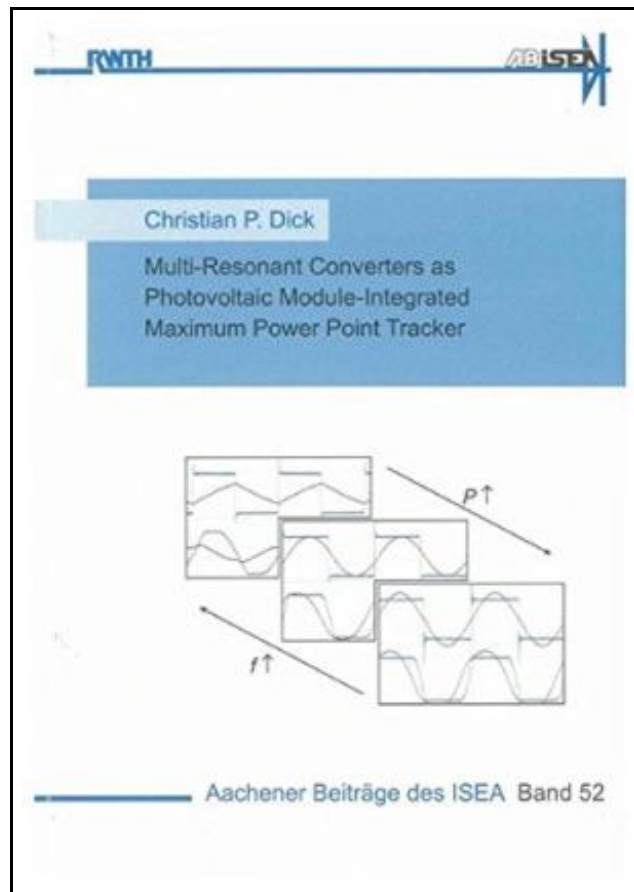


Multi-Resonant Converters as Photovoltaic Module-Integrated Maximum Power Point Tracker



Filesize: 9.61 MB

Reviews

*Excellent electronic book and helpful one. I could comprehend everything out of this published e book. I discovered this pdf from my i and dad suggested this book to discover.
(Dr. Daphnee Homenick II)*

MULTI-RESONANT CONVERTERS AS PHOTOVOLTAIC MODULE-INTEGRATED MAXIMUM POWER POINT TRACKER

[DOWNLOAD](#)

Shaker Verlag Nov 2010, 2010. Buch. Book Condition: Neu. 21x14.8x cm. Neuware - Module-integrated photovoltaic (PV) systems show high robustness against mismatching of the PV-generator, e.g. reasoned by partial shading. Thus, the surface potential for PV can be increased by the unevenly irradiated surfaces using module-integrated PV. Consequently, the important, already sealed surfaces in urban areas can be utilized to contribute to a sustainable energy supply. Different module-integrated system concepts are reviewed and compared. The parallel module-integrated converter concept is identified as the most flexible, safe and cost effective solution. It consists of modules with module-integrated DC-DC converters, feeding into one DC-distribution line in parallel. Since grid connection and metering is performed in a central unit, the critical DC-DC converter is designed to minimum functionality, i.e. maximum power point tracking, safety and efficiency. The system is flexible and scalable for arbitrary modules and can be combined with classical string or central systems. In this work a multi-resonant LLC-type converter providing galvanic isolation is identified as the best topology, regarding soft-switching of semiconductor devices, high part-load efficiency and controllability. Detailed investigations are carried out for three research foci of the DC-DC converter. With the goal of high converter efficiency, first design rules are derived in a holistic approach for the resonant tank comprising five degrees of freedom. As second step, the integration of the magnetic resonant tank elements into one transformer-inductor device is analyzed. It is identified and included in the design rules, that an important design parameter of the previous step is only a function of geometry and material of the transformer-inductor device. Finally, the design and analysis of single- and three-phase LLC-type converter solutions are considered and experimentally verified. Conclusions are given and detailed aspects on how to make use of single-phase and three-phase DC-DC converter advantages are qualified....



[Read Multi-Resonant Converters as Photovoltaic Module-Integrated Maximum Power Point Tracker Online](#)



[Download PDF Multi-Resonant Converters as Photovoltaic Module-Integrated Maximum Power Point Tracker](#)

Related Books



Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers...

[Read PDF »](#)



Crochet: Learn How to Make Money with Crochet and Create 10 Most Popular Crochet Patterns for Sale: (Learn to Read Crochet Patterns, Charts, and Graphs, Beginner s Crochet Guide with Pictures) (Paperback)

Createspace, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Getting Your FREE Bonus Download this book, read it to the end and...

[Read PDF »](#)



No Friends?: How to Make Friends Fast and Keep Them (Paperback)

Createspace, United States, 2014. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Do You Have NO Friends ? Are you tired of not having any...

[Read PDF »](#)



How to Make a Free Website for Kids (Paperback)

Createspace, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Table of Contents Preface Chapter # 1: Benefits of Having a Website Chapter...

[Read PDF »](#)



Read Write Inc. Phonics: Blue Set 6 Non-Fiction 2 How to Make a Peach Treat (Paperback)

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. 205 x 74 mm. Language: N/A. Brand New Book. These decodable non-fiction books provide structured practice for children learning to read. Each set of books...

[Read PDF »](#)