

Reliability of power electronic converter systems

Type de contenu : Texte

Type de médiation : sans médiation

Titre(s) : Reliability of power electronic converter systems / edited by Henry Shu-hung Chung, Huai Wang, Frede Blaabjerg and Michael Pecht

A pour autre édition sur un support différent : Reliability of power electronic converter systems
978-1-8491-9902-5

Auteur(s) : Chung, Henry Shu-hung

Autre(s) responsabilité(s) : Blaabjerg, Frede (1963-....) (Éditeur scientifique)
Wang, Huai (19..-....) (Éditeur scientifique)
Pecht, Michael (1952-....) (Éditeur scientifique)

Editeur, producteur : London : Institution of Engineering and Technology, 2015, cop. 2016

Description matérielle : 1 vol. (XII-489 p.) : illustrations ; 25 cm

Collection : IET power and energy series 80

ISBN : 9781849199018
1849199019

EAN : 9781849199018

Appartient à la collection : IET power and energy series 2513-8804 80

Classification décimale Dewey : 621.317 23

Note sur les bibliographies et les index : Notes bibliogr. Index

Résumé ou extrait : The main aims of power electronic converter systems (PECS) are to control, convert, and condition electrical power flow from one form to another through the use of solid-state electronics. This book outlines current research into the scientific modeling, experimentation, and remedial measures for advancing the reliability, availability, system robustness, and maintainability of PECS at different levels of complexity. Drawing on the experience of an international team of experts, this book explores the reliability of PECS covering topics including an introduction to reliability engineering in power electronic converter systems; anomaly detection and remaining-life prediction for power electronics; reliability of DC-link capacitors in power electronic converters; reliability of power electronics packaging; modeling for life-time prediction of power semiconductor modules; minimization of DC-link

capacitance in power electronic converter systems; wind turbine systems; smart control strategies for improved reliability of power electronics system; lifetime modelling; power module lifetime test and state monitoring; tools for performance and reliability analysis of power electronics systems; fault-tolerant adjustable speed drive systems; mission profile-oriented reliability design in wind turbine and photovoltaic systems; reliability of power conversion systems in photovoltaic applications; power supplies for computers; and high-power converters. Reliability of Power Electronic Converter Systems is essential reading for researchers, professionals and students working with power electronics and their applications, particularly those specialising in the development and application of power electronic converters and systems."

Sujet - Nom commun : Fiabilité

Convertisseurs électriques

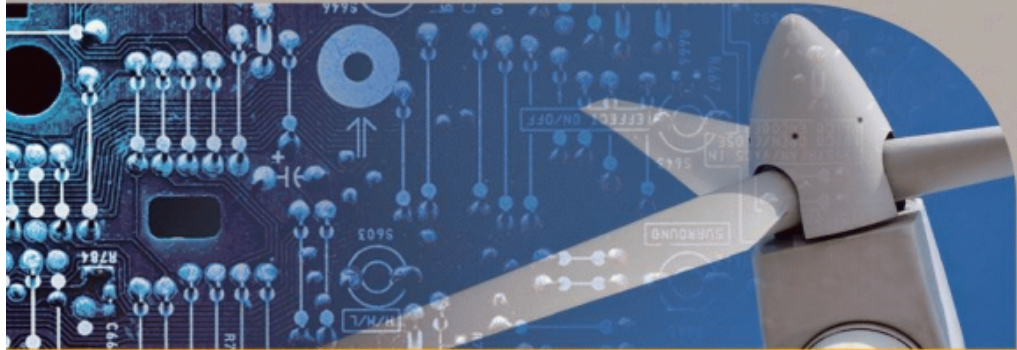
Reliability (Engineering)

Electric current converters

Image de présentation :



Power and Energy Series 80



Reliability of Power Electronic Converter Systems

Edited by Henry Shu-hung Chung,
Huai Wang, Frede Blaabjerg
and Michael Pecht