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Titolo	Conducted Electromagnetic Interference in Power Converters : Modeling, Prediction and Reduction / / Xinbo Ruan [and three others]
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ISBN	981-9992-95-8
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Descrizione fisica	1 online resource (227 pages)
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Soggetti	Electric current converters Electromagnetic interference
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- The measurement of conducted EMI and the EMI filter design -- Mixed mode noise reduction and the CM, DM noise equivalent circuit for boost PFC converter -- The conducted EMI spectra of average current controlled boost PFC converter and the EMI filter design -- The conducted EMI spectra of CRM boost PFC converter and the EMI filter design -- A generalized lumped capacitance model for the transformer -- The equivalent noise source for analyzing the CM noise in isolated power converters/- Shielding-cancellation technique for reducing the CM noise in isolated power converters -- Hybrid passive cancellation for reducing the CM noise in isolated power converters -- Reducing the CM noise in phase-shift full-bridge converter -- CM voltage cancellation method in power converters -- Reducing the CM current at the input and output sides in DC-AC inverters.
Sommario/riassunto	This book belongs to the subject of electrical engineering. It focuses on the modeling, prediction and reduction of conducted EMI in power converters including the AC-DC rectifiers, DC-DC converters and DC-AC inverters and provides the analytical models and solutions to conducted EMI issues in practical applications. The theoretical analysis, simulation and experimental results are well presented with figures and tables. This book is an essential and valuable reference for the

graduate students and academics majoring in power electronics and the engineers being engaged in solving the conducted EMI issues in power converters. Senior undergraduate students majoring in electrical engineering and automation engineering also find this book useful.