CONTENTS

Foreword	VII
Contactless Power Transfer – Theoretical Principles and Fields of Applications – Andrei Marinescu, Mihai Iordache, Lucian Mandache	1
Inductive Power Charging forElectric Vehicles in Misalignment Conditions – Constantin M. Apostoaia, Mihai Cernat	8
Design of Wireless Electromagnetic Energy Transfer Systems – Mihai Iordache, Victor Bucată, Dragoș Niculae, Marilena Stănculescu, Maria-Lavinia Bobaru	15
An Analysis on Efficiency of Wireless Transfer Energy Due to a Misalignment of Two Coils—Dragoş Niculae, Marilena Stănculescu, Mihai Iordache, Maria-Lavinia Bobaru	21
Wireless Power Transfer Analysis Using Scattering Parameters – Marilena Stănculescu, Lavinia Bobaru, Mihai Iordache, Dragoș Niculae, Victor Bucată	26
Easy Design Procedure of PCB Inductors Using WEBENCH Coil Designer – Catalin Bibirica, Sandu Cristian, Lucian Ene, Mihai Iordache	32
Modeling, Simulation and Practical Realization of the Spiral Inductors Used in Wireless Power Systems – Claudia Păcurar, Adina Răcăsan, Vasile Topa, Călin Munteanu, Claudia Constantinescu	38