DESCRIPTION

This book is devoted to resonant energy conversion in power electronics. It is a practical, systematic guide to the analysis and design of various dc-dc resonant inverters, high-frequency rectifiers, and dc-dc resonant converters that are building blocks of many of today's high-frequency energy processors. Designed to function as both a superior senior-to-graduate level textbook for electrical engineering courses and a valuable professional reference for practicing engineers, it provides students and engineers with a solid grasp of existing high-frequency technology, while acquainting them with a number of easy-to-use tools for the analysis and design of resonant power circuits. Resonant power conversion technology is now a very hot area and in the center of the renewable energy and energy harvesting technologies.

ABOUT THE AUTHOR

Marian K. Kazimierczuk, PhD, DSci, is the Robert J. Kegerreis Distinguished Professor of Teaching and was Brage Golding Distinguished Professor of Research Award at Wright State University. D. Kazimierczuk has taught graduate courses in high-frequency power electronics for more than twenty years in the Department of Electrical Engineering. He has won the Board of Trustees' Award for Faculty Excellence, several Excellence in Teaching and Research Awards from Wright State University, the Outstanding Teaching Award from the American Society for Engineering Education, and the National Professorship of Technical Sciences awarded by the President of Poland. He holds seven patents and is the author of six books, 145 peer-reviewed journal
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**FEATURES**

• Contains material class-tested by authors over many years at Wright State University.

• Solutions Manual available.

• Provides a comprehensive and timely coverage of state-of-the art resonant conversion technology.

• Details design procedures for a large variety of high-frequency dc-ac resonant inverters, rectifiers, and dc-dc resonant converters.

• Offers numerous analysis and design examples, schematics, summaries, end-of-chapter problems, review questions, and extensive bibliographies.

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