DESCRIPTION

This book covers instantaneous power theory as well as the importance of design of shunt, series, and combined shunt-series power active filters and hybrid passive-active power filters

- Illustrates pioneering applications of the \( p-q \) theory to power conditioning, which highlights distinct differences from conventional theories
- Explores \( p-q-r \) theory to give a new method of analyzing the different powers in a three-phase circuit
- Provides exercises at the end of many chapters that are unique to the second edition

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Hirofumi Akagi is a Professor in the department of electrical and electronic engineering at the Tokyo Institute of Technology. His research interest includes power conversion systems and its applications to industry, transportation, and utility. He has authored and coauthored some 120 IEEE Transactions papers and two invited papers published in Proceedings of the IEEE in 2001 and 2005. He was elected as an IEEE Fellow in 1996, a Distinguished Lecturer of the IEEE Power Electronics and Industry Applications Societies for 1998-1999. He received six IEEE Transactions prize paper awards, and 15 IEEE Industry Applications Society Committee prize paper awards. He is the recipient of the 2001 IEEE Power Electronics William E. Newell Award, the 2004
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