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Autore	Frick Achim
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Technologies such as renewable energy alternatives including wind, solar and biomass, storage technologies and electric engines are creating a different landscape for the electricity industry. Using sources and ideas from technologies such as renewable energy alternatives, Research and Technology Management in the Electricity Industry explores a different landscape for this industry and applies it to the electric industry supported by real industry cases. Divided into three sections, Research and Technology Management in the Electricity Industry introduces a range of methods and tools including technology assessment, forecasting, roadmapping, research and development portfolio management and technology transfer. These tools are then applied to emerging technologies in this industry with case studies including data from various organizations including Bonneville Power Administration and Energy Trust of Oregon, from sectors including lighting and wind energy. The final section considers innovation through these technologies. A product result of a collaboration between Bonneville Power Administration and Portland State University, Research and Technology Management in the Electricity Industry is a comprehensive collection of methods, tools, examples and pathways for future innovation in the electricity industry.

3. Record Nr.	UNINA9911019306203321
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Sommario/riassunto

A comprehensive treatment of ultrafast optics This book fills the need for a thorough and detailed account of ultrafast optics. Written by one of the most preeminent researchers in the field, it sheds new light on technology that has already had a revolutionary impact on precision frequency metrology, high-speed electrical testing, biomedical imaging, and in revealing the initial steps in chemical reactions. Ultrafast Optics begins with a summary of ultrashort laser pulses and their practical applications in a range of real-world settings. Next, it reviews important background material, including an introduction to Fourier series and Fourier transforms, and goes on to cover: . Principles of mode-locking . Ultrafast pulse measurement methods . Dispersion and dispersion compensation . Ultrafast nonlinear optics: second order . Ultrafast nonlinear optics: third order . Mode-locking: selected advanced topics . Manipulation of ultrashort pulses . Ultrafast time-resolved spectroscopy . Terahertz time-domain electromagnetics Professor Weiner's expertise and cutting-edge research result in a book that is destined to become a seminal text for engineers, researchers, and graduate students alike.
