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Descrizione fisica	1 online resource (288 pages)
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Soggetti	Energy efficiency Artificial intelligence Power electronics Energy Efficiency Artificial Intelligence Power Electronics, Electrical Machines and Networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Nota di contenuto	Introduction -- Detection of Transient Events in Time Series -- Appliance Signature Extraction -- Appliance Identification Based on Template Matching -- Steady State Current Decomposition Based Appliance Identification -- Machine Learning Based Appliance Identification -- Hidden Markov Models Based Appliance Identification -- Deep Learning Based Appliance Identification -- Deterministic Prediction of Electric Load Time Series -- Interval Prediction of Electric Load Time Series.
Sommario/riassunto	Focusing on non-intrusive load monitoring techniques in the area of smart grids and smart buildings, this book presents a thorough introduction to related basic principles, while also proposing improvements. As the basis of demand-side energy management, the non-intrusive load monitoring techniques are highly promising in terms of their energy-saving and carbon emission reduction potential. The book is structured clearly and written concisely. It introduces each aspect of these techniques with a number of examples, helping readers to understand and use the corresponding results. It provides latest strengths on the non-intrusive load monitoring techniques for

engineers and managers of relevant departments. It also offers extensive information and a source of inspiration for researchers and students, while outlining future research directions.
