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Titolo	Solar Photovoltaic System Applications : A Guidebook for Off-Grid Electrification / / edited by Parimita Mohanty, Tariq Muneer, Mohan Kolhe
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Solar radiation fundamentals and PV system components -- PV System Design for Off-Grid Applications -- PV component selection for off-grid applications -- Performance of solar PV systems -- Economics and management of off-grid solar PV system -- Hybrid Energy System for Rural Electrification in Sri Lanka.
Sommario/riassunto	Presenting a complete guide for the planning, design and implementation of solar PV systems for off-grid applications, this book features analysis based on the authors' own laboratory testing as well as their in the field experiences. Incorporating the latest developments in smart-digital and control technologies into the design criteria of the PV system, this book will also focus on how to integrate newer smart design approaches and techniques for improving the efficiency, reliability and flexibility of the entire system. The design and implementation of India's first-of its-kind Smart Mini-Grid system (SMG) at TERI premises, which involves the integration of multiple renewable energy resources (including solar PV) through smart

controllers for managing the load intelligently and effectively is presented as a key case study. Maximizing reader insights into the performance of different components of solar PV systems under different operating conditions, the book will be of interest to graduate students, researchers, PV designers, planners, and practitioners working in the area of solar PV design, implementation and assessment.