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Titolo	Solar Photovoltaic Power Plants [[electronic resource]] : Advanced Control and Optimization Techniques / / edited by Radu-Emil Precup, Tariq Kamal, Syed Zulqadar Hassan
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Descrizione fisica	1 online resource (XVII, 250 p. 174 illus., 95 illus. in color.)
Collana	Power Systems, , 1612-1287
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Soggetti	Production of electric energy or Power Electronics, Electrical Machines and Networks Energy Efficiency Control and Systems Theory
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Nota di contenuto	Adaptive Control Techniques for Three-Phase Grid-Connected Photovoltaic Inverters -- Application of sliding-mode control for maximum power point tracking of PV systems -- Predictive Control of Four-Leg Converters for Photovoltaic Energy Systems -- A Novel Maximum Power Point Tracking Method for Photovoltaic Application Using Secant Incremental Gradient Based on Newton Raphson -- Study on control of hybrid photovoltaic-wind power system using Xilinx System Generator -- Articial Intelligence for Photovoltaic Systems -- Applications of Improved Versions of Fuzzy Logic Based Maximum Power Point Tracking for Controlling Photovoltaic Systems -- A New Method For Generating Short-Term Power Forecasting Based On Articial Neural Networks And Optimization Methods For Solar Photovoltaic Power Plants -- Evaluation on Training Algorithms of Back Propagation Neural Network for a Solar Photovoltaic based DSTATCOM System -- Power Extraction from PV Module using Hybrid ANFIS Controller -- An Online Self Recurrent Direct Adaptive Nero-fuzzy Wavelet based Control of Photovoltaic Systems.
Sommario/riassunto	This book discusses control and optimization techniques in the broadest sense, covering new theoretical results and the applications of

newly developed methods for PV systems. Going beyond classical control techniques, it promotes the use of more efficient control and optimization strategies based on linearized models and purely continuous (or discrete) models. These new strategies not only enhance the performance of the PV systems, but also decrease the cost per kilowatt-hour generated. .