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| Descrizione fisica      | 1 online resource (XXI, 146 p. 60 illus., 48 illus. in color.)   |
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| Soggetti                | Electronic circuits<br>Electrical engineering<br>Communications Engineering, Networks  |
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| Livello bibliografico   | Monografia   |
| Nota di bibliografia    | Includes bibliographical references.   |
| Nota di contenuto       | Chapter 1: Transmission Line Protection Philosophy -- Chapter 2: Transmission Line Protection: Issues & Research Needs -- Chapter 3: Adaptive Numerical Distance Relaying Scheme -- Chapter 4: Discrimination Between Power Swing and Line Fault Based on Voltage and Reactive Power Sensitivity -- Chapter 5: Sequence-space Aided Disturbance Classifier Scheme Based on Support Vector Machine -- Chapter 6: Auto-reclosure Scheme with Adaptive Dead Time Control Based on Synchro-check Principle -- Chapter 7: Summary.  |
| Sommario/riassunto      | This book presents the state-of-the-art approach for transmission line protection schemes for smart power grid. It provides a comprehensive solution for real-time development of numerical relaying schemes for future power grids which can minimize cascade tripping and widespread blackout problems prevailing all around the world. The book also includes the traditional approach for transmission line protection along with issues and challenges in protection philosophy. It highlights the issues for sheltering power grid from unwanted hazards with very fundamental approach. The book follows a step-by-step approach for resolving critical issues like high impedance faults, power swing detection and auto-reclosing schemes with adaptive protection process. The book also covers the topic of hardware solution for real- |

time implementation of auto-reclosing scheme for transmission line protection schemes along with comparative analysis with the recently developed analytical approach such as Artificial Neural Network (ANN), Support Vector Machine (SVM) and other machine learning algorithms. It will be useful to researchers and industry professionals and students in the fields of power system protection.

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