1. Record Nr. UNINA9910731478603321 Autore Salkuti Surender Reddy Titolo Power Quality in Microgrids: Issues, Challenges and Mitigation Techniques / / edited by Surender Reddy Salkuti, Papia Ray, Arvind R. Singh Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2023 Pubbl/distr/stampa **ISBN** 981-9920-66-3 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (584 pages) Collana Lecture Notes in Electrical Engineering, , 1876-1119 ; ; 1039 Altri autori (Persone) RayPapia SinghArvind R Disciplina 621.3121 Soggetti Electric power production Photovoltaic power generation Electric power distribution Electrical Power Engineering **Photovoltaics Energy Grids and Networks** Mechanical Power Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction to Power Quality in Microgrids -- Application of Computational Intelligence Methods for Power Quality Disturbance Detection, Classification and Mitigation in Microgrids -- A Comprehensive Power Quality Mitigation Tool: UPQC -- Real-Time Validation of Power Quality Enhancement Techniques in a Distribution Network. . Sommario/riassunto This book provides a brief insight of various challenges and its mitigation techniques in microgrid due to power quality (PQ) issues. The central concept of this book revolves around the PQ issues in microgrid. The main objective of this book is to make aware of the power and control engineers with different innovative techniques to mitigate the challenges due to PQ issues in microgrid. The topics covered in this book are PQ disturbances in microgrid and different recent and innovative schemes to mitigate them. The book emphasizes

technical issues, theoretical background, and practical applications that

drive postgraduates, researchers, and practicing engineers with right advanced skills, vision, and knowledge in finding microgrid power quality issues, various technical challenges and providing mitigation techniques for the future sustainable microgrids.