1. Record Nr. UNINA9910678259703321 Proceedings of the 7th purple mountain forum on smart grid protection **Titolo** and control (PMF2022) // edited by Yusheng Xue, Yuping Zheng, and Antonio Gomez-Exposito Gateway East, Singapore: ,: Springer, , [2023] Pubbl/distr/stampa ©2023 **ISBN** 981-9900-63-8 [1st ed. 2023.] Edizione 1 online resource (884 pages) Descrizione fisica Disciplina 621.31 Soggetti Smart power grids Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Design and Implementation of Twin Operation and Maintenance System for Power Grid Dispatching and Control System -- Compressed Sensing Algorithm for Short Data Window in Distribution Network -- A Comparison Study of Mixed-integer Formulations for Hydro-thermal SCUC Problem -- Robust Optimal Dispatching Method for Electric Vehicles-integrated Microgrid under Uncertainties -- Marginal Unit Location Method Based on Dual Simplex Sensitivity Analysis -- The analysis of AC faults in AC/DC hybrid distribution system with SOP. This book includes original, peer-reviewed research papers from the Sommario/riassunto 7th PURPLE MOUNTAIN FORUM on Smart Grid Protection and Control PMF2022), held in Nanjing, China, on August 14-15, 2022. The accepted papers cover the following topics: 1. Advanced power transmission technology 2. AC/DC hybrid power grid technology 3. Power Internet of Things Technology and Application 4. Operation,

7th PURPLE MOUNTAIN FORUM on Smart Grid Protection and Control PMF2022), held in Nanjing, China, on August 14-15, 2022. The accepted papers cover the following topics: 1. Advanced power transmission technology 2. AC/DC hybrid power grid technology 3. Power Internet of Things Technology and Application 4. Operation, control and protection of smart grid 5. Active distribution network technology 6. Power electronic technology and application 7. New technology of substation automation 8. Energy storage technology and application 9. Application of new technologies such as artificial intelligence, blockchain, and big data 10. Application of Information and Communication Technology 11. Low-carbon energy planning and security 12. Low-carbon operation of the power system 13. Low-carbon energy comprehensive utilization technology 14. Carbon

trading and power market 15. Carbon emission stream and carbon capture technology 16. Energy saving and smart energy technology 17. Analysis and evaluation of low-carbon efficiency of power system 18. Carbon flow modelling in power system operation The papers included in this proceeding share the latest research results and practical application examples on the methodologies and algorithms in these areas, which makes the book a valuable reference for researchers, engineers, and university students.