Record Nr. UNINA9910866581103321 Autore Yin Yunfei Titolo Robust Control Strategies for Power Electronics in Smart Grid Applications / / by Yunfei Yin, Lei Liu, Zhijian Hu, Hao Lin, Ligang Wu Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 9783031531880 [1st ed. 2024.] Edizione Descrizione fisica 1 online resource (219 pages) Collana Lecture Notes in Electrical Engineering, , 1876-1119; ; 1034 Altri autori (Persone) LiuLei HuZhijian LinHao WuLigang Disciplina 621.317 Soggetti Electrical engineering Automatic control Electric power production Electrical and Electronic Engineering Control and Systems Theory **Electrical Power Engineering** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia General Introduction -- Cascade Control for Three Phase Two-Level Nota di contenuto Power Converters -- Robust High-Quality Current Control for Three-Level NPC Converters -- Direct Power Control for Three-Level NPC Converters -- Fuzzy Sliding Mode Control for Three-Level NPC Converters -- Sliding Mode Control for Power Converters under Unbalanced Grid Conditions -- Adaptive Optimal Control for PMSM Servo System -- Model Predictive Control for Load Frequency Regulation with PEVs -- Credibility-Based Distributed Frequency Estimation for PEVs -- Conclusion and Further Work. Sommario/riassunto Navigating the forefront of smart grid technology, the book, "Robust Control Strategies for Power Electronics in Smart Grid Applications," delves into innovative approaches, offering a fresh perspective on how

to address the dynamic challenges in this field. With a focus on robust control strategies, the book provides a comprehensive exploration of

diverse power converter configurations, presenting novel solutions for achieving optimal efficiency and performance in smart grid applications.