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Nota di contenuto	Introduction -- High Voltage Direct Current Transmission -- VSC-HVDC Control System -- VSC HVDC under AC and DC Fault Conditions -- VSC-HVDC Simulation Results -- Experimental Investigation for HVDC System -- Conclusions and Future Work -- Index.
Sommario/riassunto	This book looks at the control of voltage source converter based high voltage direct current (VSC-HVDC). The objective is to understand the control structure of the VSC-HVDC system and establish the tuning criteria for the proportional-integral (PI) control of the converter controllers. Coverage includes modeling of the VSC-based HVDC transmission system using MATLAB and Simulink simulation package; implementation of control strategies for the VSC-based HVDC transmission system; and analysis of the developed system behavior under different conditions (normal and fault conditions). The book provides researchers, students, and engineers working in electrical power system transmission and power electronics and control in power transmission with a good understanding of the VSC-based HVDC transmission system concept and its behavior. Focuses on the analysis of the control structure in HVDC systems; Provides a solid understanding of the VSC-based HVDC transmission system concept and of its behavior; Models the VSC-based HVDC transmission system using MATLAB and Simulink.