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Nota di contenuto	High-Current Vacuum Arcs Phenomena at Transmission Voltage Level Dielectric Recovery Properties after Current Interruption in Vacuum Closing/Opening Displacement Curve of Transmission Voltage Level Vacuum Circuit Breakers Vacuum Interrupters at Transmission Voltage Level Vacuum Circuit Breakers at Transmission Voltage Level Capacitive Switching in Vacuum
Sommario/riassunto	Vacuum circuit breakers are widely used in distribution power systems for their advantages such as maintenance free and eco-friendly. Nowadays, most circuit breakers used at transmission voltage level are SF6 circuit breakers, but the SF6 they emit is one of the six greenhouse gases defined in Kyoto Protocol. Therefore, the development of transmission voltage level vacuum circuit breaker can help the environment. The switching arc phenomena in transmission voltage level vacuum circuit breakers are key issues to explore. This book focuses on the high-current vacuum arcs phenomena at transmission voltage level, especially on the anode spot phenomena, which significantly influence the success or failure of the short circuit current interruption. Then, it addresses the dielectric recovery property in current interruption. Next it explains how to determine the closing/opening displacement curve of transmission voltage level vacuum circuit breakers based on the vacuum arc phenomena. After that, it explains how to determine key design parameters for vacuum interrupters and vacuum circuit breakers at transmission voltage level.

At the end, the most challenging issue for vacuum circuit breakers, capacitive switching in vacuum, is addressed. The contents of this book will benefit researchers and engineers in the field of power engineering, especially in the field of power circuit breakers and power switching technology.
