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	Sommario/riassunto	This book offers a comprehensive reference guide to the important topics of fault analysis and protection system design for DC grids, at various voltage levels and for a range of applications. It bridges a much-needed research gap to enable wide-scale implementation of energy-efficient DC grids. Following an introduction, DC grid architecture is presented, covering the devices, operation and control methods. In turn, analytical methods for DC fault analysis are presented for different types of faults, followed by separate chapters on various DC fault identification methods, using time, frequency and time-frequency domain analyses of the DC current and voltage signals. The unit and non-unit protection strategies are discussed in detail, while a dedicated chapter addresses DC fault isolation devices. Step-by-step guidelines are provided for building hardware-based experimental test setups, as well as methods for validating the various algorithms. The book also features several application-driven case studies.