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Nota di contenuto	Contents; List of contributors; Preface; Acknowledgements; 1 Benjamin Franklin and lightning rods; 2 Lightning parameters of engineering interest; 3 Rocket-triggered lightning and new insights into lightning protection gained from triggered-lightning experiments; 4 Attachment of lightning flashes to grounded structures; 5 Protection against lightning surges; 6 External lightning protection system; 7 Internal lightning protection system; 8 Risk analysis; 9 Low-frequency grounding resistance and lightning protection; 10 High-frequency grounding; 11 Soil ionization 12 Lightning protection of low-voltage networks13 Lightning protection of medium voltage lines; Appendix A13 Procedure to calculate the lightning performance ofdistribution lines according to IEEE Std. 1410-2004(from Reference 4); Appendix B13 The LIOV-Monte Carlo (LIOV-MC) procedure tocalculate the lightning performance of distributionlines (from Reference 56); Appendix C13 The LIOV code: models and equations; Acknowledgements; References; 14 Lightning protection of wind turbines; 15 Lightning protection of telecommunication towers; 16 Lightning protection of satellite launch pads 17 Lightning protection of structures with risk of fire and explosion18

	Lightning and trees; 19 Lightning warning systems; 20 Lightning-caused injuries in humans; 21 Lightning standards; 22 High-voltage and high-current testing; 23 Return stroke models for engineering applications; Index
Sommario/riassunto	Lightning is a natural phenomenon that has always fascinated humans. It is also a destructive force, and the science of protecting humans and their belongings on earth is called lightning protection. This book provides the reader with a thorough background in almost every aspect of lightning protection. The contents of the book, distributed over 23 chapters, covers all aspects of lightning protection including lightning parameters of engineering interest, the evaluation of the risk imposed by lightning strikes, the art of installing lightning protection systems on various structures, basic pri