

1. Record Nr.	UNINA9910143589403321
Autore	Horvath Tibor <1928->
Titolo	Understanding lightning and lightning protection [[electronic resource]] : a multimedia teaching guide // Tibor Horvath
Pubbl/distr/stampa	Chichester, England ; ; Hoboken, NJ, : Wiley Baldock [England], : Research Studies Press, c2006
ISBN	0-470-03087-9 1-280-64882-1 9786610648825 0-470-03088-7
Descrizione fisica	1 online resource (221 p.)
Collana	RSP series in electrostatics and electrostatic applications
Disciplina	551.5632 693.8/98
Soggetti	Lightning protection Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. [185]-187) and index.
Nota di contenuto	Understanding Lightning and Lightning Protection; Contents; PREFACE; INTRODUCTION; Guide to use the program; 1. CLOUD, CYCLONE AND FRONTS; Development of a cloud; Growth of a thunderstorm cloud; Development of a cyclone; Warm and cold fronts; Distribution of thunderstorms; 2. ELECTRIC CHARGES IN CLOUDS; Processes of charge separation; Charging process in the liquid phase; Charging process during freezing; Final distribution of charges; Static electric field; Relation to the ionosphere; 3. DISCHARGE PROCESSES IN AIR; Photon processes; Excitation by photon; Ionisation and absorption RecombinationElectron collisions; Excitation by electron; Ionisation by collision; Discharges; Electron avalanche; Streamer discharge; Klydonograph; Leader discharge; 4. DEVELOPMENT OF THE LIGHTNING FLASH; Start on drops in the cloud; From leader to main stroke; Multiple stroke; Upward leader; The Boys-camera: Principle and construction; The Boys-camera: Operation; Boys-record of ideal lightning; Real Boys-records; 5. PHYSICS OF THE LIGHTNING DISCHARGE; Properties of a downward leader; Condition of connecting

leader; Striking process; Development of main stroke; Multiple and upward stroke
The current wave
Lightning parameters; Distribution functions; 6. CURIOUS LIGHTNING PHENOMENA; Properties of ball lightning; Ball lightning-theories; Resonance theory; Quantum-theory; Theory of magnetic vortex; Photos of ball lightning; Beaded lightning; Stroke from clear sky; Discharge to the ionosphere; 7. INDUCED VOLTAGE; Ampere's law; Rectangular loop + infinite conductor; Rectangular loop + cut conductor; Reduction to basic components; Triangular loop; Polygonal loop; Induced voltage due to direct stroke; Induced current due to direct stroke; Induced voltage due to distant stroke
Induced current due to distant stroke
8. DYNAMIC FORCES DUE TO LIGHTNING; Parallel wires; Force due to lightning on a rod struck at the top; Force due to lightning on a horizontal wire; Force due to lightning on a metal plate; Force of leaded current at inversion of wire; Force of leaded current on a tube; Dynamic force on a console; Slit effect; Damage on tree; 9. HEAT EFFECTS ON METAL OBJECTS; Heating a metal plate; Change of temperature in a metal plate; Equations of melting a metal plate; Crater and droplets; Melting a wire at contact spot; Melting a wire leading current
Probability of melting
10. LIGHTNING ATTACHMENT; Point of orientation; The striking distance; Distribution and density functions; The expected frequency of stroke; The principle of calculation; Collection space; 11. COLLECTION SPACES OF STRUCTURES; The principle of collection space; Dividing the collection space; Two conductors; Lightning rod on tower; Air terminations of block-house; The collection space of one mesh; 12. PROTECTIVE EFFECT ON FLAT ROOF; Air termination systems on blockhouse; Diagrams related to several air terminations; Application of rolling sphere method
13. PROTECTION OF INCLINED ROOF

Sommario/riassunto

The advent of complex intelligent structures and low-voltage electronic installations within buildings requires increasingly sophisticated lightning protections techniques. As a multimedia book, Understanding Lightning and Lightning Protection is a unique, interactive self-teaching tool that provides an in-depth understanding of lightning protection. Understanding Lightning and Lightning Protection helps the reader to understand the propagation of waves within complex intelligent structures within buildings, and the operation of systems designed to protect these structures. It

2. Record Nr.	UNINA9910706862503321
Autore	Powars David S.
Titolo	The effects of the Chesapeake Bay impact crater on the geological framework and correlation of hydrogeologic units of the lower York-James Peninsula, Virginia // by David S. Powars and T. Scott Bruce
Pubbl/distr/stampa	[Reston, Virginia] : , : U.S. Department of the Interior, U.S. Geological Survey, , 1999
Descrizione fisica	1 online resource : illustrations, maps (some color)
Collana	U.S. Geological Survey professional paper ; ; 1612
Soggetti	Impact craters - Virginia - Virginia Peninsula Geology, Structural - Virginia - Virginia Peninsula Hydrogeology - Virginia - Virginia Peninsula Geology, Structural Hydrogeology Atlantic Ocean Chesapeake Bay Virginia Virginia Peninsula
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from title screen (viewed October 21, 2014). Prepared in cooperation with the Hampton Roads Planning District Commission. The online version of Professional Paper 1612 is composed of HTML and PDF files. The main text constitutes one HTML file. Figures, which are linked from the text, open in separate windows when accessed from the text. (If the text window is maximized, the figure windows may open underneath it.) Figures are 100-dpi JPEG files, which are suitable for printing. The appendixes are one PDF file, and the tables are another. Each plate is a separate image file and a PDF file. Sectional headings for the text are hot linked below.
Nota di bibliografia	Includes bibliographical references (pages 55-57).