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Soggetti	Plasma (Ionized gases) - Conductivity Gases - Electric properties Electric discharges through gases Electronic apparatus and appliances - Materials Electronic books.
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Nota di contenuto	Front Cover; Dedication; Contents; Preface; Acknowledgments; Author; Section I: 1 Atom; Chapter 1: Argon (Ar); Chapter 2: Cesium (Cs); Chapter 3: Helium (He); Chapter 4: Krypton (Kr); Chapter 5: Mercury (Hg); Chapter 6: Neon (Ne); Chapter 7: Potassium (K); Chapter 8: Sodium (Na); Chapter 9: Xenon (Xe); Section II: 2 Atoms; Chapter 10: Bromine (Br2); Chapter 11: Carbon Monoxide (CO); Chapter 12: Chlorine (Cl2); Chapter 13: Deuterium (D2); Chapter 14: Deuterium Bromide (DBr); Chapter 15: Deuterium Chloride (DCl); Chapter 16: Deuterium Iodide (DI); Chapter 17: Fluorine (F2) Chapter 18: Hydrogen (H2)Chapter 19: Hydrogen Bromide (HBr); Chapter 20: Hydrogen Chloride (HCl); Chapter 21: Hydrogen Fluoride (HF); Chapter 22: Hydrogen Iodide (HI); Chapter 23: Iodine (I2); Chapter 24: Nitric Oxide (NO); Chapter 25: Nitrogen (N2); Chapter 26: Oxygen (O2); Section III: 3 Atoms; Chapter 27: Carbon Dioxide (CO2); Chapter 28: Carbon Disulfide (CS2); Chapter 29: Carbon Oxysulfide (COS);

Chapter 30: Chlorine Dioxide (ClO2); Chapter 31: Heavy Water (D2O); Chapter 32: Hydrogen Sulfide (H2S); Chapter 33: Nitrogen Dioxide (NO2); Chapter 34: Nitrous Oxide (N2O)
Chapter 35: Ozone (O3)Chapter 36: Sulfur Dioxide (SO2); Chapter 37: Water Vapor (H2O); Section IV: 4 Atoms; Chapter 38: Acetylene (C2H2); Chapter 39: Ammonia (NH3); Chapter 40: Boron Trichloride (BCl3); Chapter 41: Boron Trifluoride (BF3); Chapter 42: Deuterated Ammonia (ND3); Chapter 43: Nitrogen Trifluoride (NF3); Chapter 44: Phosphine (PH3); Chapter 45: Phosphorous Trifluoride (PF3); Section V: 5 Atoms; Chapter 46: Bromochloromethane (CH2BrCl); Chapter 47: Bromomethane (CH3Br); Chapter 48: Bromotrichloromethane (CBrCl3); Chapter 49: Bromotrifluoromethane (CBrF3)
Chapter 50: Carbon Tetrachloride (CCl4)Chapter 51: Chlorodibromomethane (CHBr2Cl); Chapter 52: Chloromethane (CH3Cl); Chapter 53: Chlorotrifluoromethane (CClF3); Chapter 54: Deuterated Methane (CD4); Chapter 55: Dibromodifluoromethane (CBr2F2); Chapter 56: Dibromomethane (CH2Br2); Chapter 57: Dichlorodifluoromethane (CCl2F2); Chapter 58: Dichloromethane (CH2Cl2) and Difluoromethane (CH2F2); Chapter 59: Fluoromethane (CH3F); Chapter 60: Formic Acid (CH2O2); Chapter 61: Germane (GeH4); Chapter 62: Germanium Tetrachloride (GeCl4); Chapter 63: Iodomethane (CH3); Chapter 64: Methane (CH4)
Chapter 65: Silane (SiH4)Chapter 66: Silicon Tetrafluoride (SiF4); Chapter 67: Sulfuryl Fluoride (SOF2); Chapter 68: Tetrabromomethane (CBr4); Chapter 69: Tetrachlorosilane (SiCl4); Chapter 70: Tetrafluoromethane (CF4); Chapter 71: Tribromofluoromethane (CBr3F); Chapter 72: Tribromomethane (CHBr3); Chapter 73: Trichlorofluoromethane (CCl3F); Chapter 74: Trichloromethane (CHCl3); Chapter 75: Trifluoromethane (CHF3); Section VI: 6 Atoms; Chapter 76: Dibromoethene (C2H2Br2); Chapter 77: Dichloroethene (C2H2Cl2); Chapter 78: Ethylene (C2H4); Chapter 79: Methanethiol (CH3SH)
Chapter 80: Methanol (CH3OH)

Sommario/riassunto

"Interactions of energetic electrons and photons with atoms, molecules, excited states and ions are generally understood to fall in the domain of gaseous electronics. Theoretical and experimental research into several facets of these interactions have continued till now, from the days when the concept of the structure of the atom, composed of electrons, protons and neutrons was revolutionary during the last years of the nineteenth century. Ingenious methods were developed for the study of interaction of electron beams with gas molecules, the energy of the beam being controlled and measured to an extraordinary degree of sophistication. Study of electrons undergoing collisions in a swarm with a distribution of energy formed a parallel branch of study. With increasing complexity of these methods advantage was taken of the enormous storage of data and fast computation of modern computers. Methods were developed to improve the congruence of results obtained from beam studies and swarm measurements"--Provided by publisher.
"Written for students and professionals, this reference is a consolidation of all the data on the atoms and molecules available in literature today. It pulls together information from the areas of electrical engineering, electronics, power engineering, high-voltage engineering, physics, and mechanical engineering. Written entirely in SI units, the book includes over 1200 tables and 800 specially-drawn charts. Each chapter stands independently, and contains a list of references for further research. This reference is available in disk format, providing a user-friendly approach to its 1,800 p. with hyperlinks to tables, figures, and other chapters."--Provided by publisher.