Record Nr. UNINA9910784600003321 Autore L'Annunziata Michael F **Titolo** Radioactivity [[electronic resource]]: introduction and history / / by Michael F. L'Annunziata; with foreword by Werner Burkart Oxford, : Elsevier, 2007 Pubbl/distr/stampa 1-281-11984-9 **ISBN** 9786611119843 0-08-054888-1 Descrizione fisica 1 online resource (633 p.) 539.7 Disciplina Soggetti Radioactivity Radioactivity - History Nuclear physicists Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Front cover; Radioactivity; Copyright page; Contents; Foreword; Preface; Nota di contenuto Acronyms, Abbreviations, and Symbols; Introduction: Radioactivity and Our Well-Being: 1 Human Health: 2 Biological Research: 3 Food and Agriculture: 4 Water Resources: 5 Marine Resources: 6 Industrial Applications; 7 Nuclear Power; 8 Summary; Radioactivity Hall of Fame-Part I: for Chapter 1: Chapter 1: Alpha Radiation; 1.1 Introduction; 1.2 Decay Energy: 1.3 Alpha-Particle Interactions with Matter: 1.4 Alpha-Particle Ranges; Radioactivity Hall of Fame-Part II: for Chapter 2; Chapter 2: Beta Radiation: 2.1 Introduction 2.2 Negatrons2.3 Positrons; 2.4 Beta-Particle Absorption and Transmission: 2.5 Stopping Power and Linear Energy Transfer: Radioactivity Hall of Fame-Part III: for Chapter 3; Chapter 3: Gammaand X-Radiation-Photons: 3.1 Introduction: 3.2 Dual Nature: Wave and Particle; 3.3 Gamma Radiation; 3.4 Annihilation Radiation; 3.5 Cherenkov Radiation; 3.6 X-Radiation; 3.7 Interactions of Electromagnetic Radiation with Matter; Radioactivity Hall of Fame-Part IV: for Chapter 4; Chapter 4: Neutron Radiation; 4.1 Introduction; 4.2

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Sommario/riassunto

Radioactivity: Introduction and Early History provides an introduction to radioactivity from natural and artificial sources on earth and radiation of cosmic origins. This book answers many questions for the layperson, student, teacher, and even practitioner as to the origins, properties, detection and measurement, and applications of radioactivity. Written at a level that most laypersons can appreciate, it includes many calculations that students and teachers may use in class work. Radioactivity: Introduction and Early History also serves as a refresher for experienced practitioners wh