Record Nr. UNINA9911019883903321 Autore Hendee William R **Titolo** Medical imaging physics / / William R. Hendee, E. Russell Ritenour New York, : Wiley-Liss, c2002 Pubbl/distr/stampa 9786610366651 **ISBN** 9781280366659 1280366656 9780470303597 047030359X 9780471461135 047146113X 9780471221159 0471221155 Edizione [4th ed.] Descrizione fisica 1 online resource (534 p.) Altri autori (Persone) RitenourE. Russell <1953-> Disciplina 616.0754 Diagnostic imaging Soggetti Imaging systems in medicine Medical physics Medical radiology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto MEDICAL IMAGING PHYSICS Fourth Edition; CONTENTS IN BRIEF; CONTENTS; PREFACE; PREFACE TO THE FIRST EDITION; ACKNOWLEDGMENTS: 1 IMAGING IN MEDICINE: OBJECTIVES: INTRODUCTION; CONCLUSIONS; REFERENCES; 2 STRUCTURE OF MATTER; OBJECTIVES; THE ATOM; SOLIDS; SUPERCONDUCTIVITY; THE NUCLEUS: NUCLEAR FISSION AND FUSION: NUCLEAR SPIN AND NUCLEAR MAGNETIC MOMENTS; NUCLEAR NOMENCLATURE; PROBLEMS; SUMMARY; REFERENCES; 3 RADIOACTIVE DECAY; OBJECTIVES; NUCLEAR

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Sommario/riassunto

This comprehensive publication covers all aspects of image formation in modern medical imaging modalities, from radiography, fluoroscopy, and computed tomography, to magnetic resonance imaging and ultrasound. It addresses the techniques and instrumentation used in the rapidly changing field of medical imaging. Now in its fourth edition, this text provides the reader with the tools necessary to be comfortable with the physical principles, equipment, and procedures used in diagnostic imaging, as well as appreciate the capabilities and limitations of the technologies.