Record Nr. UNINA9910790683903321 CT imaging: practical physics, artifacts, and pitfalls / / editor, **Titolo** Alexander C. Mamourian; contributors, Harold Litt [and three others] Pubbl/distr/stampa New York:,: Oxford University Press,, 2013 **ISBN** 0-19-935286-0 0-19-998799-8 Descrizione fisica 1 online resource (253 p.) Altri autori (Persone) MamourianAlexander C LittHarold I Disciplina 616.07/5722 Soggetti Tomography Nervous system - Radiography Radiation dosimetry Radiation - Safety measures Whole body imaging Heart - Tomography 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 History and physics of CT imaging / Alexander C. Mamourian --Radiation safety and risks / Alexander C. Mamourian and Josef P. Debbins -- CT cardiac imaging / Supratik Moulik and Harold Litt --Cardiac CT artifacts and pitfalls / Supratik Moulik and Harold Litt --Neuro CT artifacts / Alex C. Mamourian -- Neuro CT pitfalls / Alex C. Mamourian -- Body CT artifacts / Nicholas Papanicolaou -- Body CT pitfalls / Nicholas Papanicolaou -- Test questions / Alexander C. Mamourian.

Sommario/riassunto CT imaging has become a mainstay of medical imaging. After 30 years

this is a mature technology but the accumulation of innovations over the past decades have given it extraordinary capabilities and new applications continue to emerge. In this book Alex Mamourian uses early CT technology to explain the fundamentals of CT imaging and then builds on that base to explain how innovations such as slip-ring and multidetector arrays allow for rapid, high resolution imaging. This book covers complex applications such as CT cardiac imaging and

dual-source dual-energy CT scanning as well as the pitfalls