Record Nr. UNINA9910350221103321 Medical Imaging Methods [[electronic resource]]: Recent Trends // **Titolo** edited by Ashutosh Kumar Shukla Pubbl/distr/stampa Singapore:,: Springer Singapore:,: Imprint: Springer,, 2019 **ISBN** 981-13-9121-1 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (147 pages) Disciplina 616.0754 Soggetti Medical physics Radiation Radiology Medical and Radiation Physics Diagnostic Radiology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto X-ray imaging (CT, fluoroscopy and radiography) - benefits and risks -- Advances in ultrasound imaging -- Advances in magnetic resonance imaging (MRI) -- Magnetic resonance spectroscopic (MRS) analysis in brain tumors -- Optical stimulation of acoustic signals - photoacoustic imaging -- LASER light modulation by ultrasound - acousto-photonic imaging -- Advances in nuclear medicine imaging -- Electron paramagnetic resonance imaging - solo and orchestra -- Ethical issues in medical imaging methods. This book provides insights into current radiology practices in Sommario/riassunto diagnostic imaging, discussing specific features of individual imaging techniques, such as sensitivity, specificity and accuracy and signal-tonoise ratio. It includes chapters on various established imaging methods as well as emerging methods such as EPR imaging, and their applications in the diagnosis of skin cancer, brain tumors, oral diseases and kidney cysts. Adopting a bottom-up approach and presenting the recent trends in a simple manner with the help of examples, the book appeals to a wide audience, including academics, researchers, medical and nursing students, as well as healthcare professionals in the field of imaging and radiology.