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Autore	Maier Andreas
Titolo	Medical Imaging Systems : An Introductory Guide / / edited by Andreas Maier, Stefan Steidl, Vincent Christlein, Joachim Hornegger
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Soggetti	Image processing - Digital techniques
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Nota di contenuto	Introduction -- System Theory -- Image Processing -- Endoscopy -- Microscopy -- Magnetic Resonance Imaging -- X-ray Imaging -- Computed Tomography -- X-ray Phase Contrast: Research on a Future Imaging Modality -- Emission Tomography -- Ultrasound -- Optical Coherence Tomography -- Acronyms. .
Sommario/riassunto	This open access book gives a complete and comprehensive introduction to the fields of medical imaging systems, as designed for a broad range of applications. The authors of the book first explain the foundations of system theory and image processing, before highlighting several modalities in a dedicated chapter. The initial focus is on modalities that are closely related to traditional camera systems such as endoscopy and microscopy. This is followed by more complex image formation processes: magnetic resonance imaging, X-ray projection imaging, computed tomography, X-ray phase-contrast imaging, nuclear imaging, ultrasound, and optical coherence tomography.