Record Nr. UNINA9910799235003321 Autore Su Ruidan **Titolo** Medical Imaging and Computer-Aided Diagnosis [[electronic resource]] : Proceedings of 2022 International Conference on Medical Imaging and Computer-Aided Diagnosis (MICAD 2022) / / edited by Ruidan Su. Yudong Zhang, Han Liu, Alejandro F Frangi Singapore: .: Springer Nature Singapore: .: Imprint: Springer, . 2023 Pubbl/distr/stampa **ISBN** 9789811667756 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (567 pages) Lecture Notes in Electrical Engineering, , 1876-1119; ; 810 Collana Altri autori (Persone) ZhangYudong LiuHan F FrangiAlejandro Disciplina 616.0754 Soggetti Biomedical engineering Signal processing Computer vision Biomedical Engineering and Bioengineering Digital and Analog Signal Processing Computer Vision Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Optical and Photo-acoustic Imaging -- Image Analysis and Signal Processing -- Shape Representation and Analysis -- Image Reconstruction -- Imaging and Genomics -- Image Guided Surgery --Image-Guided Interventions and Surgery -- COVID-19 image processing -- Segmentation -- Pattern recognition -- Feature extraction -- Classifier design -- Machine learning including deep learning -- Radiomics -- CAD workstation design -- Human-computer interaction -- Computer Aided Diagnosis on COVID-19. Sommario/riassunto This book covers virtually all aspects of image formation in medical

This book covers virtually all aspects of image formation in medical imaging, including systems based on ionizing radiation (x-rays, gamma rays) and non-ionizing techniques (ultrasound, optical, thermal, magnetic resonance, and magnetic particle imaging) alike. In addition, it discusses the development and application of computer-aided detection and diagnosis (CAD) systems in medical imaging. Given its

coverage, the book provides both a forum and valuable resource for researchers involved in image formation, experimental methods, image performance, segmentation, pattern recognition, feature extraction, classifier design, machine learning / deep learning, radiomics, CAD workstation design, human–computer interaction, databases, and performance evaluation.