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Collana	Contemporary medical imaging series
Disciplina	617.540754028563
Soggetti	Chest - Imaging Artificial intelligence - Medical applications Heart Diseases - diagnostic imaging Artificial Intelligence Image Interpretation, Computer-Assisted - methods Thoracic Diseases - diagnostic imaging Tòrax Malalties del tòrax Malalties del cor Diagnòstic per la imatge Intel·ligència artificial Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	PART I: Artificial Intelligence: Technical Considerations and Fundamentals -- Artificial Intelligence: A Century-Old Story -- Demystifying Artificial Intelligence Technology in Cardiothoracic Imaging: The Essentials -- Artificial Intelligence Algorithm Development for Biomedical Imaging -- Data Preparation for Artificial Intelligence -- Data Storage, Cloud Usage and Artificial Intelligence Pipeline -- How to Build Artificial Intelligence Algorithms for Imaging Applications -- Radiomics: Technical Background -- Biobanks and Artificial Intelligence -- Biostatistics and Artificial Intelligence -- PART II: Artificial Intelligence: General Approaches and Applications --

Structured Reporting in Medical Imaging: the Role of Artificial Intelligence -- Artificial Intelligence: Clinical Relevance and Workflow -- Patient Selection and Scan Preparation Optimization: the Role of Artificial Intelligence -- Artificial Intelligence for Image Enhancement and Reconstruction in Magnetic Resonance Imaging -- Artificial Intelligence Based Image Reconstruction in Cardiac Magnetic Resonance -- Artificial Intelligence Based Image Reconstruction in Computed Tomography Imaging -- Artificial Intelligence Based Contrast Medium Optimization -- Radiation Dose Optimization: the Role of Artificial Intelligence -- Artificial Intelligence Integration into the Computed Tomography System -- Artificial Intelligence Integration into the Magnetic Resonance System -- Magnetic Resonance Fingerprinting: the Role of Artificial Intelligence -- Currently Available Artificial Intelligence Software for Cardiothoracic Imaging -- PART III: Artificial Intelligence: Cardiac Applications -- Cardiac CT Guidelines and Clinical Applications: Where does Artificial Intelligence fit in? -- Natural Language Processing for Cardiovascular Applications -- Artificial Intelligence Based Evaluation of Coronary Calcium -- Artificial Intelligence Based Evaluation of Coronary Atherosclerotic Plaques -- Artificial Intelligence Based Coronary Artery Disease Reporting & Data System (CAD-RADS) -- Artificial Intelligence Based CT Derived Fractional Flow Reserve (CT-FFR) -- Artificial Intelligence Based Evaluation of Cardiac Valves -- Artificial Intelligence Based Diagnosis and Procedural Planning for Aortic Valve Disease -- Artificial Intelligence Based Quantification of Cardiac Fat -- Radiomics in Cardiac CT -- Cardiac MR Guidelines and Clinical Applications: Where does Artificial Intelligence fit in? -- Artificial Intelligence Based Evaluation of Functional Cardiac Magnetic Resonance Imaging -- Magnetic Resonance Imaging based 4D Cardiac Flow: the Role of Artificial Intelligence -- Magnetic Resonance Imaging based Coronary Flow: the Role of Artificial Intelligence -- Artificial Intelligence Based Evaluation of Cardiac Congenital Disease -- Cardiac Nuclear Medicine: the Role of Artificial Intelligence -- Cardiac Ultrasound Imaging: the Role of Artificial Intelligence -- Artificial Intelligence Based Cardiovascular Risk Stratification -- PART IV: Artificial Intelligence: Thoracic Applications -- Artificial Intelligence Based Evaluation of Patients with Chronic Obstructive Pulmonary Disease -- Artificial Intelligence Based Evaluation of Patients with Interstitial Lung Disease -- Artificial Intelligence Based Evaluation of Infectious Disease Imaging: A COVID-19 Perspective -- Artificial Intelligence for Lung Cancer Screening and Nodule Detection -- Artificial Intelligence for Lung Cancer Characterization and Prognosis -- Artificial Intelligence for Opportunistic Chest CT Screening and Prognostication -- Artificial Intelligence Based Detection of Pulmonary Vascular Disease -- Artificial Intelligence Based Evaluation of the Aorta -- Artificial Intelligence and Radiomics Based Evaluation of Carotid Artery Disease -- PART V: Artificial Intelligence: General Considerations -- Artificial Intelligence in Medicine: Laws, Regulations and Privacy -- Health Economics, Economic Evaluation and Artificial Intelligence Technology -- Commercialization & Intellectual Property of Artificial Intelligence Applications in Cardiovascular Imaging -- Ethical Considerations of Artificial Intelligence Applications in Healthcare -- How to Write and Review an Artificial Intelligence Paper -- Cybersecurity in the Era of Artificial Intelligence -- How Artificial Intelligence Will Reshape Healthcare and Medical Imaging: A Global Perspective.

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