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Nota di contenuto	General Introduction -- Physics Informed Neural Networks PINNS -- New Methodology and Modelling In Magnetic Resonance Imaging -- Physics informed Neural Network for Addressing Spatial and Temporal -- Machine Learning Model for Diagnosis of Pulmonary Arterial Hypertension -- A Convolution Neural Network for Artificial Intelligence-Based Classification of Alzheimer's Diseases -- Physics informed Neural Networks for Nuclear Magnetic Resonance Guided Clinical Hyperthermia.
Sommario/riassunto	This book pushes the limits of conventional MRI visualization methods by completely changing the medical imaging landscape and leads to

innovations that will help patients and healthcare providers alike. It enhances the capabilities of MRI anatomical visualization to a level that has never before been possible for researchers and clinicians. The computational and digital algorithms developed can enable a more thorough understanding of the intricate structures found within the human body, surpassing the constraints of traditional 2D methods. The Physics-informed Neural Networks as presented can enhance three-dimensional rendering for deeper understanding of the spatial relationships and subtle abnormalities of anatomical features and sets the stage for upcoming advancements that could impact a wider range of digital heath modalities. This book opens the door to ultra-powerful digital molecular MRI powered by quantum computing that can perform calculations that would take supercomputers millions of years.