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Sommario/riassunto This book, 'The Challenges of MRI Techniques and Quantitative

Methods for Health', coordinated by Hélène Ratiney and Olivier Beuf, explores the fundamental principles and advanced techniques used in Magnetic Resonance Imaging (MRI). It covers topics such as the principles of MRI, hardware components, magnetization, excitation, signal-to-noise ratio, and spatial localization. The book also delves into the theoretical principles and practical guidelines of coils, fast imaging, acceleration techniques, and diffusion MRI. It serves as a comprehensive resource for professionals and researchers in the field of medical imaging, providing insights into the latest advancements and challenges in MRI technology.