Mri. Basic Principles and Applications. 4th Edition

Description: Fourth Edition Brings This Popular Guide Thoroughly Up To Date With The Latest MRI Findings, Techniques, And Applications

For its Fourth Edition, the acclaimed MRI: Basic Principles and Applications has been rigorously revised, enabling readers to quickly master the principles and take advantage of all the latest MRI applications. Among the new materials are fresh and updated discussions on 3D imaging, real-time imaging, cardiac imaging, and parallel acquisition techniques. In addition, readers will find dozens of brand-new images to illustrate key concepts. Moreover, clinical protocols have been thoroughly updated and revised to reflect current methodologies.

Throughout the book, readers will find easy-to-follow coverage of all the latest findings, technologies, and techniques, including:

Nephrotoxic effects of gadolinium-based contrast media
New scan techniques, including radial scanning
Parallel acquisition and cardiovascular imaging techniques
New applications, including spin tagging and diffusion tensor imaging
3 Tesla and 7 Tesla scanning
Hardware innovations, including large-scale array coils
New motion compensation techniques

With its clear explanations and ample illustrations, this Fourth Edition maintains all the hallmarks of the previous edition that have made this book a fixture in MRI labs around the world. Students and practitioners—from physicians to radiologists to technicians—will gain a full, accurate understanding of the underlying physics and the clinical applications of MRI, all with a minimum of mathematical formulas and technical details.

From Reviews of the Third Edition

"...successful in transferring key ideas in an undaunting and progressive manner ... thoroughly deserves a place on the bookshelf."
—NMR in Biomedicine, Vol 17(4), June 2004

"...it will reward the reader with an understanding of the principles underpinning nuclear magnetic resonance."
—Yale Journal of Biology and Medicine, May 2003

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