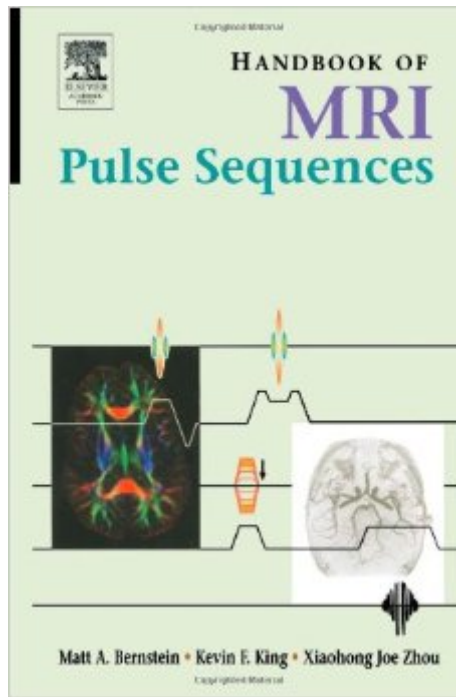


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# Handbook Of MRI Pulse Sequences



## Synopsis

Magnetic Resonance Imaging (MRI) is among the most important medical imaging techniques available today. There is an installed base of approximately 15,000 MRI scanners worldwide. Each of these scanners is capable of running many different "pulse sequences", which are governed by physics and engineering principles, and implemented by software programs that control the MRI hardware. To utilize an MRI scanner to the fullest extent, a conceptual understanding of its pulse sequences is crucial. This book offers a complete guide that can help the scientists, engineers, clinicians, and technologists in the field of MRI understand and better employ their scanner.

Â Explains pulse sequences, their components, and the associated image reconstruction methods commonly used in MRI  
Â Provides self-contained sections for individual techniques  
Â Can be used as a quick reference guide or as a resource for deeper study  
Â Includes both non-mathematical and mathematical descriptions  
Â Contains numerous figures, tables, references, and worked example problems

## Book Information

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## Customer Reviews

This book is an excellent overview and reference for MRI pulse sequences. It has been recommended to me as a reference by several scientists, and anyone who works in the MRI field should consider buying this book -- even if you are not a pulse programmer, this book will give you a much better understanding of different sequences and which one may be most appropriate for your research application. It does a good job of describing sequences in a qualitative as well as

mathematical manner. One slight problem with the book is that it is oriented towards just MRI physics, and thus if one wants to sit down at an actual scanner and try to program or implement the sequence, one might not have enough specific details about hardware-related issues (such as gradient duty cycles, RF power calibration, SAR, memory allocation, etc) to actually implement a sequence. Thus, the book is best supplemented with a review of current literature, as well as manufacturer documentation or examples of previously written pulse sequences.

Great book for those who want to know in and outs of MRI sequences. Very detailed in terms of mathematical description

This is a fantastic book. As someone who works with MR pulse sequences, I find myself reaching for this book constantly. The explanations are clear and the book is really well-written. Most importantly, this book reads like a contemporary treatise on MR pulse sequences and techniques. A good investment for MR researchers -- highly recommended!

The most essential book for any one seriously pursuing MRI. Gives a very thorough mathematical treatment of the subject matter. Extremely helpful for graduate students and professors alike. A must buy!

This is the best book I've seen so far for pulse sequence design. It's great because it has simple examples, and then goes in depth so it's really easy to grasp concepts. It's different from books like Hacke. This book is awesome for more practical day-to-day type use in a scanner and reference for pulse sequence design and does well categorizing the types of sequences.

I got to know this good handbook from an international conference. It was sold out in few days during the exhibition period. I strongly recommend every MRI guy own at least one copy of it. ^\_\_^

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