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| Edizione | [Third edition.] |
| Descrizione fisica | 1 online resource (587 pages) |
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| Sommario/riassunto | "Presents basic concepts, experimental methodology and data acquisition, and processing standards of in vivo NMR spectroscopy This book covers, in detail, the technical and biophysical aspects of in vivo NMR techniques and includes novel developments in the field such as hyperpolarized NMR, dynamic 13C NMR, automated shimming, and parallel acquisitions. Most of the techniques are described from an educational point of view, yet it still retains the practical aspects appreciated by experimental NMR spectroscopists. In addition, each chapter concludes with a number of exercises designed to review, and often extend, the presented NMR principles and techniques. The third edition of In Vivo NMR Spectroscopy: Principles and Techniques has been updated to include experimental detail on the developing area of hyperpolarization; a description of the semi-LASER sequence, which is now a method of choice; updated chemical shift data, including the addition of 31P data; a troubleshooting section on common problems related to shimming, water suppression, and quantification; recent developments in data acquisition and processing standards; and MatLab scripts on the accompanying website for helping readers |

calculate radiofrequency pulses. Provide an educational explanation and overview of in vivo NMR, while maintaining the practical aspects appreciated by experimental NMR spectroscopists Features more experimental methodology than the previous edition End-of-chapter exercises that help drive home the principles and techniques and offer a more in-depth exploration of quantitative MR equations Designed to be used in conjunction with a teaching course on the subject In Vivo NMR Spectroscopy: Principles and Techniques, 3rd Edition is aimed at all those involved in fundamental and/or diagnostic in vivo NMR, ranging from people working in dedicated in vivo NMR institutes, to radiologists in hospitals, researchers in high-resolution NMR and MRI, and in areas such as neurology, physiology, chemistry, and medical biology.  "--

"Sales handles - A more succinct overview of the basic principles of NMR - Experimental detail on developing area of hyperpolarization - Description of the semi-LASER sequence, now a method of choice - Updated chemical shift data including the addition of 31P data - A trouble shooting section on common problems related to shimming, water suppression and quantification - Addition of more experimental methodology Market description (Please include secondary markets) Undergraduate and graduate students in medicine, biomedical engineering, chemistry, biophysics and related fields with a focus on in vivo NMR. In addition, relevant to people working in dedicated in vivo NMR institutes and radiologists working in hospitals, as well as researchers in high-resolution NMR, neurology, physiology, chemistry, and medical biology"--