Berichte aus der Medizinischen Physik

Uwe Klose (Ed.)

Proceedings of Data Acquisition and Evaluation Methods in Proton MR Spectroscopy 2010

Shaker Verlag Aachen 2011

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at http://dnb.d-nb.de.

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Printed in Germany.

ISBN 978-3-8440-0095-5 ISSN 1617-2965

Shaker Verlag GmbH • P.O. BOX 101818 • D-52018 Aachen Phone: 0049/2407/9596-0 • Telefax: 0049/2407/9596-9

Internet: www.shaker.de • e-mail: info@shaker.de

Preface

Since the beginning of clinical magnetic resonance imaging, proton magnetic resonance spectroscopy (pMRS) has been used as an additional tool for tissue characterization and metabolite quantification. In contrast to imaging techniques, where many new sequences were introduced within the last 20 years, the development of new techniques in pMRS was less dynamic. Nevertheless, several scientists worked and are still working on methodological developments of pMRS-techniques and some improvements were obtained within the last years.

In September 2010, a workshop on methods in pMRS was performed at the University of Tübingen and several scientists described their recent progress in data acquisition and evaluation techniques. Some of the authors extended the content of their workshop contribution to an elaborated manuscript, and the collection of these papers is now available in this proceedings book. The presented research studies are only examples of actual projects, which are obtained from many scientific groups who are working in the development of the pMRS techniques. Therefore, this book is far from giving a complete overview on new pMRS methods, but it want to show that pMRS has still methodological challenges and it is a field worth investing additional research resources.

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