

Contents of Volume 161

Number 1, March 2003

REGULAR ARTICLES

- 1 **Parametric and non-parametric statistical analysis of DT-MRI data**
Sinisa Pajevic and Peter J. Basser
- 15 **Single excitation multiple image RARE (SEMI-RARE): ultra-fast imaging of static and flowing systems**
A.J. Sederman, M.D. Mantle, and L.F. Gladden
- 25 **Multi-exponential analysis of magnitude MR images using a quantitative multispectral edge-preserving filter**
Jean-Marie Bonny, Odile Boespflug-Tanguly, Michel Zanca, and Jean-Pierre Renou
- 35 **Powder pattern recoupling at 10 kHz spinning speed applied to cellulose**
R. Witter, St. Hesse, and U. Sternberg
- 43 **Multiple-quantum magic-angle spinning spectroscopy using nonlinear sampling**
David Rovnyak, Claudiu Filip, Boris Itin, Alan S. Stern, Gerhard Wagner, Robert G. Griffin, and Jeffrey C. Hoch
- 56 **Selective polarization inversion of protons in rotating solids**
Gil Goobes, Elena Vinogradov, and Shimon Vega
- 64 **Hydration-optimized oriented phospholipid bilayer samples for solid-state NMR structural studies of membrane proteins**
Francesca M. Marassi and Kevin J. Crowell
- 70 **Flow encoded NMR spectroscopy for quantification of metabolite flow in intact plants**
Michael Szimtenings, Silvia Olt, and Axel Haase
- 77 **Magnetically aligned phospholipid bilayers in weak magnetic fields: optimization, mechanism, and advantages for X-band EPR studies**
Thomas B. Cardon, Elvis K. Tiburu, and Gary A. Lorigan
- 91 **Using NMR to study full intact wine bottles**
A.J. Weekley, P. Bruins, M. Sisto, and M.P. Augustine
- 99 **Calculation of electric fields induced by body and head motion in high-field MRI**
Feng Liu, Huawei Zhao, and Stuart Crozier
- 108 **Detection of acoustic waves by NMR using a radiofrequency field gradient**
Guillaume Madelin, Nathalie Baril, Czeslaw J. Lewa, Jean-Michel Franconi, Paul Canioni, Eric Thiaudiére, and Jacques D. de Certaines
- 112 **Applications of fast diffusion measurement using Difftrain**
C. Buckley, K.G. Hollingsworth, A.J. Sederman, D.J. Holland, M.L. Johns, and L.F. Gladden

COMMUNICATION

- 118 **Protein dynamics using frequency-dependent order parameters from analysis of NMR relaxation data**
Djaudat Idiyatullin, Vladimir A. Daragan, and Kevin H. Mayo

Number 2, April 2003

REGULAR ARTICLES

- 127 **High-sensitivity sapphire cells for high pressure NMR spectroscopy on proteins**
Martin Reinhard Arnold, Hans Robert Kalbitzer, and Werner Kremer
- 132 **Pulse error compensating symmetric magic-echo trains**
G.S. Boutis, P. Cappellaro, H. Cho, C. Ramanathan, and D.G. Cory

- 138 Predictions of pulsed field gradient NMR echo-decays for molecules diffusing in various restrictive geometries. Simulations of diffusion propagators based on a finite element method**
Håkan Hagslätt, Bengt Jönsson, Magnus Nydén, and Olle Söderman
- 148 Experimental demonstration of quantitation errors in MR spectroscopy resulting from saturation corrections under changing conditions**
Craig J. Galbán, Scott J. Ellis, and Richard G.S. Spencer
- 154 PJNMR: a platform-independent graphical simulation tool for NMR spectroscopy**
Paul-Jean Letourneau, Robert Boyko, and Brian D. Sykes
- 168 Background gradient suppression in pulsed gradient stimulated echo measurements**
Phillip Zhe Sun, John Georg Seland, and David Cory
- 174 Restricted linear least square treatment processing of heteronuclear spectra of biomolecules using the ANAFOR strategy**
Guy Lippens, Philippe R. Bodart, François Taulelle, and Jean-Paul Amoureaux
- 183 Efficient solid state NMR powder simulations using SMP and MPP parallel computation**
Jørgen Holm Kristensen and Ian Farnan
- 191 Solid state ^{33}S NMR of inorganic sulfides**
Todd A. Wagler, William A. Daunch, Peter L. Rinaldi, and Allen R. Palmer
- 198 Chemically selective NMR imaging of a 3-component (solid–solid–liquid) sedimenting system**
Steven D. Beyea, Stephen A. Altobelli, and Lisa A. Mondy
- 204 Degradation of historical paper: nondestructive analysis by the NMR-MOUSE**
B. Blümich, S. Anferova, S. Sharma, A.L. Segre, and C. Federici
- 210 EPR study of some rare-earth ions (Dy^{3+} , Tb^{3+} , and Nd^{3+}) in $\text{YBa}_2\text{Cu}_3\text{O}_6$ -compound**
M.R. Gafurov, V.A. Ivanshin, I.N. Kurkin, M.P. Rodionova, H. Keller, M. Gutmann, and U. Staub
- 215 Generalization of the lineshape useful in magnetic resonance spectroscopy**
David F. Howarth, John A. Weil, and Zbigniew Zimpel
- 222 A method for rapid characterization of diffusion**
Y.-Q. Song, M.D. Hürlimann, and C. Flaum
- 234 Interference of homonuclear decoupling and exchange in the solid-state NMR of perfluorocyclohexane**
Deborah E. McMillan, Paul Hazendonk, and Paul Hodgkinson
- COMMUNICATIONS**
- 242 A microstrip transmission line volume coil for human head MR imaging at 4 T**
Xiaoliang Zhang, Kamil Ugurbil, and Wei Chen
- 252 NMR-microscopy with TrueFISP at 11.75 T**
Sascha Köhler, Karl-Heinz Hiller, Mark Griswold, Wolfgang R. Bauer, Axel Haase, and Peter M. Jakob
- 258 Symmetrical reconversion: measuring cross-correlation rates with enhanced accuracy**
Philippe Pelupessy, Guillermo Minguez Espallargas, and Geoffrey Bodenhausen
- 265 Resolution enhancement in in vivo NMR spectroscopy: detection of intermolecular zero-quantum coherences**
Cornelius Faber, Eberhard Pracht, and Axel Haase
- 275 AUTHOR INDEX FOR VOLUME 161**