CONTENTS

SPECTROSCOPIC METHODOLOGY
Rapid Communication
Accelerated High-Bandwidth MR Spectroscopic Imaging Using Compressed Sensing,
Published online 26 May 2016

Full Paper
In Vivo Brain Rosette Spectroscopic Imaging (RSI) with LASER Excitation, Constant Gradient Strength Readout, and Automated LCModel Quantification for all Voxels, Claudiu V. Schirda, Tiejun Zhao, Ovidiu C. Andronesi, Yoojin Lee, Jullie W. Pan, James M. Mountz, Hoby P. Hetherington, and Fernando E. Boada ........................................... 380
Published online 26 August 2015

PRECLINICAL AND CLINICAL SPECTROSCOPY
Full Papers
Published online 21 September 2015

Saturation-Transfer Effects and Longitudinal Relaxation Times of 31P Metabolites in Fibroglandular Breast Tissue at 7T, Wybe J. M. van der Kemp, Jannie P. Wijnen, Peter R. Luijten, and Dennis W. J. Klomp, Published online 29 September 2015

Quantitative Evaluation of Radiation-Induced Lung Injury with Hyperpolarized Xenon Magnetic Resonance, Haidong Li, Zhiying Zhang, Xiuchao Zhao, Xiangping Sun, Chaoxu Ye, and Xin Zhou ................................................................. 408
Published online 24 September 2015

IMAGING METHODOLOGY
Full Papers
Published online 31 October 2015

Utility of Real-Time Field Control in T2*-Weighted Head MRI at 7T, Yolanda Duerst, Bertram J. Wilm, Michael Wyss, Benjamin E. Dietrich, Simon Gross, Thomas Schmid, David O. Brunner, and Klaas P. Pruessmann .................................................................... 430
Published online 26 August 2015

High Spatial Resolution Compressed Sensing (HSPARSE) Functional MRI, Zhongnan Fang, Nguyen Van Le, Markin Choy, and Jin Hyung Lee ................................................................. 440
Published online 29 October 2015

Feasibility and Reproducibility of Whole Brain Myelin Water Mapping in 4 Minutes Using Fast Acquisition with Spiral Trajectory and Adiabatic T2prep (FAST-T2) at 3T, Thanh D. Nguyen, Kofi Deh, Elizabeth Monohan, Sneh Pandya, Pascal Spincemaille, Ashish Raj, Yi Wang, and Susan A. Gauthier ........................................................................ 456
Published online 29 August 2015

Identification and Reduction of Image Artifacts in Non–Contrast-Enhanced Velocity-Selective Peripheral Angiography at 3T, Taehoon Shin, Qin Qin, Jang-Yeon Park, Robert S. Crawford, and Sanjay Rajagopalan................................................................. 466
Published online 26 August 2015

A Fully Flow-Compensated Multiecho Susceptibility-Weighted Imaging Sequence: The Effects of Acceleration and Background Field on Flow Compensation, Dongmei Wu, Saifeng Liu, Sagar Buch, Yongquan Ye, Yongming Dai, and E. Mark Haacke ................................................................. 478
Published online 2 September 2015

Large Dynamic Range Relative B1+ Mapping, Francesco Padorno, Aaron T. Hess, Paul Aljabar, Shaihan J. Malik, Peter Jezzard, Matthew D. Robson, Joseph V. Hajnal, and Peter J. Koopmans ........................................................................ 490
Published online 26 August 2015
Electrostatic Interactions are Important for the Distribution of Gd(DTPA)²⁺ in Articular Cartilage, Jenny Algotsson, Jan Forsman, Daniel Topgaard, and Olle Söderman ................................................. 500 Published online 2 September 2015

Hepatic Fat Fraction and Visceral Adipose Tissue Fatty Acid Composition in Mice: Quantification with 7.0T MRI, Benjamin Leporq, Simon A. Lambert, Maxime Ronot, Imane Boucenna, Pierre Colinart, Francois Cauchy, Valerie Vilgrain, Valerie Paradis, and Bernard E. Van Beers............................ 510 Published online 3 November 2015

An Improved Region Growing Algorithm for Phase Correction in MRI, Jingfei Ma, Jong Bum Son, and John D. Hazle ................................................... 519 Published online 12 September 2015

MR-Based Conductivity Imaging Using Multiple Receiver Coils, Joonsung Lee, Jaewook Shin, and Dong-Hyun Kim ..................................................... 530 Published online 16 September 2015

Robust Time-Shifted Spoke Pulse Design in the Presence of Large B0 Variations with Simultaneous Reduction of Through-Plane Dephasing, B1+ Effects, and the Specific Absorption Rate Using Parallel Transmission, Bastien Guérin, Jason P. Stockmann, Mehran Baboli, Angel Torrado-Carvajal, Andrew V. Stenger, and Lawrence L. Wald ........................................... 540 Published online 7 October 2015

Free-Breathing Slice-Interleaved Myocardial T₂ Mapping with Slice-Selective T₂ Magnetization Preparation, Tamer A. Bashia, Steven Bellm, Sébastien Roujol, Shingo Kato, and Reza Nezafat............................................. 555 Published online 19 October 2015

Hyperpolarized ¹²⁹Xe Imaging of the Rat Lung using Spiral IDEAL, Ozkan Doganay, Trevor Wade, Elaine Hegarty, Charles McKenzie, Rolf F. Schulte, and Giles E. Šantyr ................................................... 566 Published online 29 August 2015

Preclinical and Clinical Imaging

Full Papers

Does Fat Suppression via Chemically Selective Saturation Affect R₂*-MRI for Transfusional Iron Overload Assessment? A Clinical Evaluation at 1.5T and 3T, Axel J. Krafft, Ralf B. Loeffler, Ruitian Song, Xiao Bian, M. Beth McCarville, Jane S. Hankins, and Claudia M. Hillenbrand ........ 591 Published online 26 August 2015

q-Space MR Imaging of Gastric Carcinoma Ex Vivo: Correlation with Histopathologic Findings, Ichiro Yamada, Keigo Hikishima, Naoyuki Miyasaka, Keiji Kato, Eisaku Ito, Kazuyuki Kojima, Tatsuyuki Kawano, Daisuke Kobayashi, Yoshinobu Eishi, and Hideyuki Okano ............. 602 Published online 29 August 2015

Validation of a T₁ and T₂* Leakage Correction Method Based on Multiecho Dynamic Susceptibility Contrast MRI Using MION as a Reference Standard, Ashley M. Stokes, Natenael Semmeneh, and C. Chad Quarles .......... 613 Published online 12 September 2015

Diffusion Anisotropy in Fresh and Fixed Prostate Tissue Ex Vivo, Roger M. Bourne, Andre Bongers, Artinck Chatterjee, Paul Sved, and Geoffrey Watson .................................................. 626 Published online 7 October 2015

Biophysics and Basic Biomedical Research

Full Papers

Influence of Water Compartmentation and Heterogeneous Relaxation on Quantitative Magnetization Transfer Imaging in Rodent Brain Tumors, Ke Li, Hua Li, Xiao-Yong Zhang, Ashley M. Stokes, Xiaoyi Jiang, Hakmook Kang, C. Chad Quarles, Zhongliang Zu, Daniel F. Gochberg, John C. Gore, and Junzhong Xu............................. 635 Published online 16 September 2015

Computer Processing and Modeling

Full Papers

Magnetic Resonance Elastography of the Brain: An In Silico Study to Determine the Influence of Cranial Anatomy, Deirdre M. McGrath, Nishant Ravikumar, Iain D. Wilkinson, Alejandro F. Frangi, and Zeike A. Taylor .................................................. 645 Published online 29 September 2015

Realistic Analytical Polyhedral MRI Phantoms, Tri M. Ngo, George S. K. Fung, Shuo Han, Min Chen, Jerry L. Prince, Benjamin M. W. Tsui, Elliot R. McVeigh, and Daniel A. Herzka .......... 663 Published online 19 October 2015