

POSTER LIST

Odd numbers will be presented on Monday, August 19th.

Even numbers will be presented on Tuesday, August 20th.

Posters with a ★ participate in the poster competition.

MR Microscopy

- P02 | Design of a lamellar phantom for validation of in vivo diffusion MRI methods
★ *Hong Jiang*
- P04 | Ultra high-field (17.6T) magnetic resonance microimaging reveals dysfunction of the circadian master clock in Alzheimer's disease brain
Alia Alia, U Roy, S Roßner
- P06 | Identification of water compartments in spinal cords by deuterium double quantum-filtered NMR
Uzi Eliav, Hadassah Shinar, Gil Navon
- P08 | Minimally invasive implantable NMR microcoil for in vivo MRS and MRI in submicroliter volumes
Yannick Crémillieux, Vi Thi Thuy Pham, Noël Pinaud, Alan Wong
- P10 | Spatial encoding magnetic resonance imaging using quadratic gradients
Sina Marhabaie, Geoffrey Bodenhausen, Philippe Pelupessy

Cellular & Molecular

- P12 | Temperature dependence of T2 relaxation times in fresh tomato pericarp
Rodolphe Leforestier, Maja Musse, François Mariette
- P14 | In-situ NMR highlights structural change during apple heating
Sylvie Clerjon, Alexandre Leca, Catherine Reanrd, Jean-Marie Bonny, Amidou Traore

Engineering & Materials

- P16 | Nuclear Magnetic Resonance Multi-Phase Flowmeter & Fluid Analyzer
Feng Deng, Shiwen Chen, Guan hong Chen, Huabing Liu, Lizhi Xiao
- P18 | Deposit layer formation during skim milk protein filtration by MRI
★ *Nicolas Schork, Sebastian Schuhmann, Estelle Amling, Hermann Nirschl, Gisela Guthausen*
- P20 | Passive radiofrequency shimming for rat head imaging at 17.2 Tesla
★ *Marc Dubois, Tania S. Vergara Gomez, Camille Jouvaud, Abdelwaheb Ourir, Julien De Rosny, Frank Kober, Redha Abdeddaim, Stefan Enoch, Luisa Ciobanu*
- P22 | NMR relaxation and oxygen permeation studies on protein-sugar matrices conditioned at different humidities
Jens Meissner, Nikolaus Nestle, Emma Thompson, Eduard Schreiner, Mireia Subinya Albrich, Fangfang Chu
- P24 | Generation of nuclear magnetic resonance logging curves using Bi-directional LSTM
Li Bo
- P26 | Exploring the Origins of Diffusive Diffraction behavior in Bottlebrush Polymers
Velencia Witherspoon, Michal Komlosh, Dan Benjamini, David Vaccarello, Peter Bassler
- P28 | Improving magnetic resonance imaging through 3D printing,
★ *Hanne Vanduffel, Dimitrios Sakellariou, Rob Ameloot*

Hardware

- P30 | NMR of chemical reactions at elevated process conditions
Hilary Fabich, Stephen Altobelli, Partha Nandi, Hans Thomann, Mark Conradi

- P32 | A New LWD Magnetic Resonance Imaging Tool
Zhe Sun, Lizhi Xiao, Guangzhi Liao, Yan Zhang, Sihui Luo, Feixue Gong, Zhihao Long
- P34 | Circuit Design of NMR Logging While Drilling Device
Yao Wei
- P36 | Matrix coil design based on target field method for Halbach magnet
★ *Yajie Xu, Ya Wang, Xiaodong Yang*
- P38 | Q-Switch for Earth-Field NMR Systems
John Zhen, Michael Johns, Paul Stanwix, Einar Fridjonsson

Mobile & Low Feld

- P40 | A radio frequency coil for non-invasive nuclear magnetic resonance detection of human finger blood glucose
★ *Junnan Wang*
- P42 | A Magnet Design of Low Gradient for NMR LWD
Yifan Wang
- P44 | The Frequency-switchable Transceiver Array with Inductive Decoupling,
Baosong Wu, Yonghyun Ha, Charles Rogers Iii, Kartiga Selvaganesan, Gigi Galiana, R. Todd Constable
- P46 | NMR depth profiling as prerequisite for restauration and conservation of Cultural Heritage
Markus Kueppers, Max Gierth, Bernhard Bluemich
- P48 | A movable MRI system for brain imaging and its pre-clinical experiments
He Yucheng, Xu Zheng, Wu Jiamin, Tan Liang
- P50 | Profiling the temperature dependent frequency of a MOUSE® for outlab MRI
Amidou Traore, Rim Alouissi, Abdellatif Benmoussa, Guilhem Pages, Jean-Marie Bonny
- P52 | Low-field Magnet Assemblies for in operando NMR Studies
Rodrigo De Oliveira Silva, João Marreiros, Arthur Gustavo Araujo-Ferreira, Everton Lucas-Oliveira, Patrick Judeinstein, Willian Trevizan, Jean-Marc Zanotti, Tito José Bonagamba, Rob Ameloot, Dimitrios Sakellariou

Biomedical

- P54 | An Image Quality Metric Based Heuristic for Accurate Pharmacokinetic Parameter Recovery using Quantitative MRI
Allister Mason, Nathan Murtha, James Rioux, Sharon Clarke, Chris Bowen, Steven Beyea
- P56 | Sub-10 μ m Resolution μ MRI Study of Rabbit Cartilage
Yang Xia, Syeda Batool
- P58 | MRI characterization of long-term brain damage induced by low dose irradiation at two different exposure ages in the mouse
Laura Mouton, Olivier Etienne, Elodie Peres, David Barrière, Fawzi Boumezbeur, François Boussin, Denis Le Bihan
- P60 | PVA Phantom for MRI Study of Myocardial Viability
Victor Rodin, Tom Anderson, Maurits Jansen, Gillian Gray, William Holmes

Hyperpolarization

- P62 | Dual Modality Imaging of Powdered Diamond: Optics and Room Temperature Hyperpolarized MRI
Xudong Lv, Fei Wang, Danila Barskiy, Emanuel Druga, Alessandra Aguilar, Benjamin Safvati, Priyanka Raghavan, Tommy Mcknelly, Raffi Nazaryan, Ben Han, Carlos A. Meriles, Jeffrey A. Reimer, Dieter Suter, Jeffrey H. Walton, Ashok Ajoy, Alexander Pines

Porous Media

- P64 | A new method to correct the effect of saturated hydrocarbon to nuclear magnetic resonance (NMR) T2 distribution in tight porous media
Xiao Liang, Zhang Wei, Xie Xiuhong
- P66 | In-situ CH₄-CO₂ Dispersion Measurements in Rock Cores
Ming Li, Sarah Vogt, Eric May, Michael Johns
- P68 | Characterization of fluid flow through wormholes created by acidification of carbonate rocks: a phase contrast imaging study
Bernd Foerster, Mariane Andreeta, Elton Montrazi, Carlos Speglich, Tito Bonagamba, Fernando Paiva
- P70 | Field-dependent effect of clays on NMR T2 relaxation of sedimentary rocks by direct two-scale simulation
★ *Yingzhi Cui, Igor Shikhov, Christoph Arns*
- P72 | Spatially-resolved T2 distribution mapping in heterogeneous rock model with phase encode MRI
Yushi Cui
- P74 | Characterization of Kerogen and Spent Shale Maturation by Solid State ¹³C and ¹H NMR Spectroscopy
★ *F. Panattoni, P. C. M. M. Magusin, J. Mitchell, E. J. Fordham, C. P. Grey*
- P76 | Study on the molecular interaction of pore surface in tight sandstone by NMR
Hanlin Liu, Guangzhi Liao, Lizhi Xiao, Yan Zhang
- P78 | Investigation of high-permeability channels using computational fluid dynamics and magnetic resonance imaging
Gustavo Solcia, Bernd Foerster, Mariane Andreeta, Tito Bonagamba, Fernando Paiva
- P80 | Water diffusion pore imaging on a 14.1 T spectrometer using glass capillary phantoms and strong gradients
Dominik Ludwig, Frederik Bernd Laun, Karel D. Klika, Peter Bachert, Tristan Anselm Kuder
- P82 | T2 Analysis using Artificial Neural Networks
Tristhal Parasram, Dan Xiao
- P84 | Homogenisation in high-level radioactive waste bentonites probed at submicroscopic length-scales using 2D μ -MRI
Galina Pavlovskaya, Frank Scotti, Sean Rigby, Thomas Meersmann, Katherine Daniels, Antony Milodowski, Jon Harrington
- P86 | Investigation of the Structure of Geopolymer Based Cements with NMR Cryoporometry and Relaxation Exchange Spectroscopy
Sarah Mailhiot, Jing Li, Hari Sreenivasan, Anu Kantola, Paivo Kinnunen, Ville-Veikko Telkki

Electrochemical

- P88 | Parallel-Plate Resonator for MRI studies of lithium ion batteries
Andrés Ramirez Aguilera, Bryce Macmillan, Sergey A. Krachkovskiy, Gillian R. Goward, Bruce J. Balcom

Flow & Diffusion

- P90 | Multi-Region Models for Predicting Features of T1-T2 Experiments
James Maneval, Madison Nelson, Linn Thrane, Joseph Seymour
- P92 | Good statistics from noisy multidimensional distributions
Alexis Reymbaut, Paolo Mezzani, João P. De Almeida Martins, Daniel Topgaard
- P94 | Probing surface-to-volume ratio in anisotropic media
Nicolas Moutal, Ivan Maximov, Denis Grebenkov
- P96 | Method improvements for diffusion tensor imaging of turbulent fluids
★ *Amy-Rae Gauthier, Noah Stoczek, Ben Newling*

- P98 | Flow imaging in a model fractured porous media at low magnetic field
Marc Fleury, Nicolas Gland
- P100 | New spatial encoding strategy for systems with ultra-short transverse relaxation times
Vincent Sarou-Kanian
- P102 | MR signal for powdered specimens
Magnus Herberthson, Cem Yolcu, Hans Knutsson, Carl-Fredrik Westin, Evren Özarslan
- P104 | Monitoring slow motion in porous media using 3D propagator mapping
★ *Jie Wang, Sabina Haber-Pohlmeier, Andreas Pohlmeier, Kira Pitman, Martin Markwitz, Audrey Chan, Petrik Galvosas*
- P106 | Phase-Encoded MRI: A Valuable Tool for Sediment Characterization and Process Monitoring
B. Zhao, W. Cha, J.C. Santamarina