

## Publikationen

1. F. Klemens, S. Schuhmann, R. Balbierer, G. Guthausen, H. Nirschl, G. Thäter, M.J. Krause: "*Noise reduction of flow MRI measurements using a lattice Boltzmann based topology optimisation approach*", Computers & Fluids **197**: 104391 (2020) DOI: 10.1016/j.compfluid.2019.104391.
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3. F. Ranzinger, A. Hille-Reichel, E. Zehe, G. Guthausen, H. Horn: "*Quantification of Evaporation and Drainage Processes in Unsaturated Porous Media Using Magnetic Resonance Imaging*", Water Resources Research **56**(2): e2019WR026658 (2020) DOI: 10.1029/2019wr026658.
4. N. Schork, S. Schuhmann, O. Gruschke, D. Groß, K. Zick, H. Nirschl, G. Guthausen: "*Recent MRI and diffusion studies of food structures*", Annual Reports on NMR Spectroscopy **100** (2020) DOI: 10.1016/bs.arnmr.2020.02.002.
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10. X. Guo, K.S. Wetzel, S.C. Solleeder, S. Spann, M.A.R. Meier, M. Wilhelm, B. Luy, G. Guthausen: "*<sup>1</sup>H PFG-NMR Diffusion Study on a Sequence-Defined Macromolecule: Confirming Monodispersity*", Macromolecular Chemistry and Physics **220**(18): 1900155 (2019) DOI: 10.1002/macp.201900155.
11. V. Räntzsch, M.B. Özén, K. Ratzsch, E. Stellamanns, M. Sprung, G. Guthausen , M. Wilhelm "*Polymer crystallization studied by hyphenated rheology techniques: RheoNMR, RheoSAXS, and RheoMicroscopy*", Macromolecular Materials and Engineering **304**(2): 1800586 (2019) DOI: 10.1002/mame.201800586.
12. E. Förster, C.C. Fraenza, J. Küstner, E. Anoardo, H. Nirschl, G. Guthausen "*Monitoring of engine oil aging by low-field nuclear magnetic resonance relaxation and diffusion*", Measurement **137**: 673 (2019) DOI: 10.1016/j.measurement.2019.02.019.
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15. X.A. Guo, S. Theissen, J. Claussen, V. Hildebrand, J. Kamphus, M. Wilhelm, B. Luy, G. Guthausen: "*Dynamics of Sodium Ions and Water in Swollen Superabsorbent Hydrogels as*

*Studied by Na-23- and H-1-NMR", Macromolecular Chemistry and Physics **220**(2): 11 (2019)*  
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