

Publications: SPHERES

Blanchard, D.; Maronsson, J. B.; Riktor, M. D.; Kheres, J.; Sveinbjörnsson, D.; Gil Bardaji, E.; Léon, A.; Juranyi, F.; Wuttke, J.; Lefmann, K.; Hauback, B. C.; Fichtner, M.; Vegge, T.; "Hindered Rotational Energy Barriers of BH₄, "Tetrahedra in β-Mg(BH₄)₂ from Quasielastic Neutron Scattering and DFT Calculations", *J. Phys. Chem. C* 116, 2013 (2012).

Bator, G.; Sawka-Dobrowolska, W.; Sobczyk, L.; Grech, E.; Nowicka-Scheibe, J.; Pawlukojc, J. A.; Wuttke, J.; Baran J.; Owczarek, M.; "4,4'-, 5,5'-, and 6,6'-dimethyl-2,2'-bipyridyls: The structures, phase transitions, vibrations, and methyl group tunneling of their complexes with chloranilic acid," *Journal of Chemical Physics* 135(4), 044509 (2011).

Häußler, W.; Holderer, O.; Unruh T.; Wuttke, J.; "High Resolution Neutron spectroscopy at the FRM II", *Neutron News*, 22, 24-30 (2011).

Léon A.; Wuttke, J.; "Hydrogen Release from Sodium Alanate Observed by Time-resolved Neutron Backscattering," *Journal of Physics: Condensed Matter* 23, 254214 (2011).

Valldor, M.; Hermann, R. P.; Wuttke, J.; Zamponi, M.; Schweika, W.; "Spin correlations in the extended kagome system YBaCo₃FeO₇", *Phys. Rev. B* 84, 224426 (2011)

Blanchard, D.; Riktor, M.; Maronsson, J.; Jacobsen, H.; Kehres, J.; Sveinbjörnsson, D.; Bardaji, E.; Leon, A.; Juranyi, F.; Wuttke, J.; Hauback, B.; Fichtner, M.; Vegge, T.; "Hydrogen Rotational and Translational Diffusion in Calcium Borohydride from Quasielastic Neutron Scattering and DFT Calculations," *Journal of Physical Chemistry C* 114, 20249 (2010).

Bordallo, H. N.; Aldridge, L. P; Wuttke, J.; Fernando, K.; Bertram, K. W.; Pardo, L. C.; "Cracks and pores- Their roles in the transmission of water confined in cementitious materials," *European Physical Journal - Special Topics* 189(1), 197-203 (2010).

Chatterji, T.; Wuttke, J.; Sazonov, A. P.; "Hyperfine interaction in Co₂SiO₄ investigated by high resolution neutron spectroscopy," *Journal of Magnetism and Magnetic Materials* 322(20), 3148-3152 (2010).

Doster, W.; Busch, S.; Gaspar, A. M.; Appavou, M. S.; Wuttke, J.; Scheer, H.; "Dynamical Transition of Protein-Hydration Water," *Physical Review Letters* 104(9), 098101 (2010).

Ghugare, S. V.; Chiessi, E.; Telling, M. T. F.; Deriu, A.; Gerelli, Y.; Wuttke, J.; Paradossi, G.; "Structure and Dynamics of a Thermoresponsive Microgel around Its Volume Phase Transition Temperature," *Journal of Physical Chemistry B* 114, 10285 (2010).

Sawka-Dobrowolska, W.; Bator, G.; Sobczyk, L.; Grech, E.; Nowicka-Scheibe, J.; Pawlukojc, A.; Wuttke, J.; "The (2:1) complex of picric acid with tetramethylpyrazine. The structure, IR spectra and tunnel splitting of methyl groups," *Journal of Molecular Structure* 975, 298-302 (2010).

Schönhals, S.; Frunza, S.; Frunza, T.; Unruh, T.; Zorn, R.; "Vibrational and molecular dynamics of nanoconfined liquid crystal", *Europ. Phys. J. – Special Topics*, 189,

251- 255 (2010).

Bordallo, H. N.; Aldridge, L. P.; Fouquet, P.; Pardo, L. C.; Unruh, T.; Wuttke, J.; Yokaichiya, F.; "Hindered Water Motions in Hardened Cement Pastes Investigated over Broad Time and Length Scales," ACS Applied Materials & Interfaces 1, 2154 (2009).

Chatterji T.; Schneider,G. J.; "Anomalous hyperfine interaction in CoF₂ investigated by high resolution neutron spectroscopy," Journal of Physics: Condensed Matter 21(43), 436008 (2009).

Chatterji T.; Schneider, G. J.; "Low-energy nuclear spin excitations in CoO," Phys. Rev. B 79, 212409 (2009).

Chatterji, T.; Schneider G. J.; Persson, J.; "Low-energy nuclear spin excitations in NdAl₂," Phys. Rev. B 79(13), 132408 (2009).

Chatterji, T.; Schneider, G.J.; van Eijck, L.; Frick, B.; Bhattacharya, D.; "Direct evidence for the Nd magnetic ordering in NdMnO₃ from the hyperfine field splitting of Nd nuclear levels," Journal of Physics: Condensed Matter 21(12), 126003 (2009).

Kirstein, O.; Prager M.; Schneider, G. J.; "Rotational dynamics and coupling of methyl group rotations in methyl fluoride studied by high resolution inelastic neutron scattering," J. Chem. Phys. 130(21), 214508 (2009).

Krutyeva, M.; Martin, J.; Arbe, A.; Colmenoro, J.; Mijangos, C.; Schneider, G. J.; Unruh, T.; Su, Y.; Richter, D.; "Neutron scattering study of the dynamics of a polymer melt under nanoscopic confinement," J. Chem. Phys. 131(17), 174901 (2009).

Sobczyk, L.; Prager, M.; Sawka-Dobrowolska, W.; Bator, G.; Pawlukojc, A.; Grech, E.; van Eijck, L.; Ivanov, A.; Rols, S.; Wuttke, J.; Unruh, T.; "The structure of diaminodurene and the dynamics of the methyl groups", J. Chem. Phys. 130, 164519 (2009).