

Britt Rosendahl Hansen - DTU Orbit (11/08/2016)

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Department of Physics - Postdoc, Former

Publications:

Evidence for SrHo₂O₄ and SrDy₂O₄ as model J1-J2 zigzag chain materials

Fennell, A., Pomjakushin, V. Y., Uldry, A., Delley, B., Prévost, B., Désilets-Benoit, A., Bianchi, A. D., Bewley, R. I., Hansen, B. R., Klimczuk, T., Cava, R. J. & Kenzelmann, M. 2014 In : *Physical Review B (Condensed Matter and Materials Physics)*. 89, 22, 5 p., 224511

Publication: Research - peer-review › Journal article – Annual report year: 2014

Magnetic ordering in TmGa

Cadogan, J. M., Stewart, G. A., Muñoz Pérez, S., Corbas, R., Hansen, B. R., Avdeev, M. & Hutchison, W. D. 2014 In : *Journal of Physics: Condensed Matter*. 26, 11

Publication: Research - peer-review › Journal article – Annual report year: 2014

ESS Technical Design Report

Åberg, M., Ahlfors, N., Ainsworth, R., Alba-Simionesco, C., Alimov, S., Aliouane, N., Alling, B., Andersson, K. G., Andersen, N. H., Hansen, B. R., Jensen, M., Klinkby, E. B., Bergbäck Knudsen, E., Lauritzen, B., Nielsen, J. B., Nielsen, S. P., Nonbøl, E., Norby, P., Poulsen, H. F., Poulsen, S. O., Rasmussen, O., Saxild, F. B., Severin, G. & Willendrup, P. K. 2013 *European Spallation Source*. 690 p.

Publication: Research - peer-review › Report – Annual report year: 2013

Neutron study of the magnetism in NiCl₂-4SC(NH₂)₂

Tsyrlin, N., Batista, C. D., Zapf, V. S., Jaime, M., Hansen, B. R., Niedermayer, C., Rule, K. C., Habicht, K. S., Prokes, K., Kiefer, K., Ressouche, E., Paduan-Filho, A. & Kenzelmann, M. 2013 In : *Journal of Physics: Condensed Matter*. 25, 21, p. 216008 12 p., 216008

Publication: Research - peer-review › Journal article – Annual report year: 2013

Simulation of a suite of generic long-pulse neutron instruments to optimize the time structure of the European Spallation Source

Lefmann, K., Kløn, K. H., Birk, J. O., Hansen, B. R., Holm, S. L., Bergbäck Knudsen, E., Lieutenant, K., von Moos, L., Sales, M., Willendrup, P. K. & Andersen, K. H. 2013 In : *Review of Scientific Instruments*. 84, 5, 10 p., 055106

Publication: Research - peer-review › Journal article – Annual report year: 2013

McStas developments for ESS simulation work

Willendrup, P. K., Klinkby, E. B., Nielsen, J. S. B., Hansen, B. R., Bergbäck Knudsen, E., Udby, L., Lefmann, K., Filges, U. & Farhi, E. 2012

Publication: Research - peer-review › Poster – Annual report year: 2012

Materials for Room Temperature Magnetic Refrigeration

Hansen, B. R. Jul 2010 Roskilde: Danmarks Tekniske Universitet, Risø Nationallaboratoriet for Bæredygtig Energi. 184 p. (Risø-PhD; No. 62(EN)).

Publication: Research › Ph.D. thesis – Annual report year: 2010

Consequences of the magnetocaloric effect on magnetometry measurements

Hansen, B. R., Bahl, C. R. H., Kuhn, L. T., Smith, A., Gschneidner, K. A. & Pecharsky, V. K. 2010 In : *Journal of Applied Physics*. 108, 4, p. 043923

Publication: Research - peer-review › Journal article – Annual report year: 2010

Gd₃Fe₅O₁₂ near the compensation temperature

Hansen, B. R., Kuhn, L. T., Bahl, C. R. H., Frandsen, C. & Mørup, S. 2010 *Program and abstracts*. Danish Physical Society, p. 63-63

Publication: Research › Conference abstract in proceedings – Annual report year: 2010

Magnetic entropy and cooling

Hansen, B. R., Kuhn, L. T. & Bahl, C. R. H. 2010 *Program and abstracts*. Danish Physical Society, p. 57-57

Publication: Research › Conference abstract in proceedings – Annual report year: 2010

Properties of magnetocaloric La(Fe,Co,Si)₁₃ produced by powder metallurgy

Hansen, B. R., Kuhn, L. T., Bahl, C. R. H., Lundberg, M., Ancona-Torres, C. E. & Katter, M. 2010 In : *Journal of Magnetism and Magnetic Materials*. 322, 21, p. 3447-3454

Publication: Research - peer-review › Journal article – Annual report year: 2010

Characterization study of a plate of the magnetocaloric material La(Fe,Co,Si)₁₃

Hansen, B. R., Katter, M., Kuhn, L. T., Bahl, C. R. H., Smith, A. & Ancona-Torres, C. E. 2009 *3rd International Conference on Magnetic Refrigeration at Room Temperature*. p. 67-73

Publication: Research - peer-review › Article in proceedings – Annual report year: 2009

Magnetism and magnetocaloric effect in LaFe_{11.9-x}Co_xSi_{1.1}

Hansen, B. R., Kuhn, L. T., Bahl, C. R. H., Ancona-Torres, C. E. & Katter, M. 2009

Publication: Research › Poster – Annual report year: 2009

Study of a plate of the magnetocaloric material La(Fe,Co,Si)₁₃

Hansen, B. R., Katter, M., Kuhn, L. T., Bahl, C. R. H., Smith, A., Ancona-Torres, C. E. & Nielsen, K. K. 2009

Publication: Research › Poster – Annual report year: 2009

Magnetic refrigeration at room temperature

Hansen, B. R. & Kuhn, L. T. 2008

Publication: Research › Poster – Annual report year: 2008

Materials research for magnetic refrigeration at room temperature

Hansen, B. R. 2008 *Energy Materials. Advances in Characterization, Modelling and Application: Proceedings*. Andersen, N. H., Eldrup, M. M., Hansen, N., Juul Jensen, D., Nielsen, E. M., Nielsen, S. F., Sørensen, B. F., Pedersen, A. S., Vegge, T. & West, S. (eds.). Roskilde: Danmarks Tekniske Universitet, Risø Nationallaboratoriet for Bæredygtig Energi, p. 267-274 413 p.

Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

Magnetic cooling for use in refrigerators

Bjørk, R., Bahl, C. R. H., Biering, I., Hansen, B. R., Jensen, J. B., Jensen, N. V., Jeppesen, S., Kuhn, L. T., Linderth, S., Petersen, T. F., Pryds, N. & Smith, A. 2007

Publication: Research › Conference abstract for conference – Annual report year: 2007

Bose-Einstein condensation of S=1 nickel spin degrees of freedom in NiCl₂-4SC(NH₂)₂

Zapf, V. S., Zocco, D., Hansen, B. R., Jaime, M., Harrison, N., Batista, C. D., Kenzelmänn, M., Niedermayer, C., Lacerda, A. & Paduan-Filho, A. 2006 In : *Physical Review Letters*. 96, p. 077204 4 p.

Publication: Research - peer-review › Journal article – Annual report year: 2006

Magnetic and Mössbauer spectroscopy studies of nanocrystalline iron oxide aerogels

Carpenter, E. E., Long, J. W., Rolison, D. R., Logan, M. S., Pettigrew, K., Stroud, R. M., Kuhn, L. T., Hansen, B. R. & Mørup, S. 2006 In : *Journal of Applied Physics*. 99, 8, p. 08N711

Publication: Research - peer-review › Journal article – Annual report year: 2006

Uniform magnetic excitations in nanoparticles

Mørup, S. & Hansen, B. R. 2005 In : *Physical Review B (Condensed Matter and Materials Physics)*. 72, 2, p. 024418

Publication: Research - peer-review › Journal article – Annual report year: 2005

Projects:

Development of Ceramic Materials for Magnetic Refrigeration at Room Temperature

Hansen, B. R., Kuhn, L. T., Bahl, C., Poulsen, F. W., Madsen, M. B., Lyubina, J. & Paturi, P.

01/04/2007 → 08/12/2010

Project: PhD