Christian Bahl - DTU Orbit (17/02/2019)

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Research outputs:

Integration of a magnetocaloric heat pump in an energy flexible residential building
Research output: Research - peer-review › Journal article – Annual report year: 2019

Active magnetic regenerators implemented as a magnetocaloric heat pump for residential buildings
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Elliptical double corrugated tubes for enhanced heat transfer
Research output: Research - peer-review › Journal article – Annual report year: 2018

Experimental and numerical comparison of multi-layered La(Fe, Si, Mn)_{13}H_y active magnetic regenerators
Research output: Research - peer-review › Journal article – Annual report year: 2018

Experimental investigation of different fluid flow profiles in a rotary multi-bed active magnetic regenerator device
Research output: Research - peer-review › Journal article – Annual report year: 2018

Experimental investigation of fifteen-layer epoxy-bonded La(Fe, Mn, Si)_{13}H_y active magnetic regenerator
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Integration of a magnetocaloric heat pump in a low-energy residential building
Research output: Research - peer-review › Journal article – Annual report year: 2018

Simulation of a magnetocaloric heating network
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Design, enhanced Thermal and Flow efficiency of a 2KW active magnetic regenerator
Research output: Research - peer-review › Paper – Annual report year: 2017

Hydrogen Decrepitation Press-Less Process Recycling of NdFeB sintered magnets
Research output: Research - peer-review › Journal article – Annual report year: 2017

Influence of magnetization on the applied magnetic field in various AMR regenerators
Research output: Research - peer-review › Journal article – Annual report year: 2017

Numerical routine for magnetic heat pump cascading
Research output: Research - peer-review › Poster – Annual report year: 2017
Operational test of bonded magnetocaloric plates
Research output: Research - peer-review › Journal article – Annual report year: 2017

Passive characterization and active testing of epoxy bonded regenerators for room temperature magnetic refrigeration
Research output: Research - peer-review › Journal article – Annual report year: 2017

Passive heat transfer enhancement in 3D corrugated tube
Research output: Research - peer-review › Paper – Annual report year: 2018

Reply to "Comment on 'Performance of Halbach magnet with finite coercivity'
Research output: Research › Comment/debate – Annual report year: 2016

Spatially resolved modelling of inhomogeneous materials with a first order magnetic phase transition
Research output: Research - peer-review › Journal article – Annual report year: 2017

The Effect of Nano-TiC Addition on Sintered Nd-Fe-B Permanent Magnets
Research output: Research - peer-review › Journal article – Annual report year: 2016

The effect of tapering on a magnetocaloric regenerator bed
Research output: Research - peer-review › Journal article – Annual report year: 2017

The influence of carbon and oxygen on the magnetic characteristics of press-less sintered NdFeB magnets
Research output: Research - peer-review › Journal article – Annual report year: 2016

The La(Fe,Mn,Si)13 Hz magnetic phase transition under pressure (Phys. Status Solidi RRL 8/2017)
Research output: Research › Other contribution – Annual report year: 2018

The La(Fe,Mn,Si)13 Hz magnetic phase transition under pressure
Research output: Research - peer-review › Journal article – Annual report year: 2017

Topology optimized permanent magnet systems
Research output: Research - peer-review › Journal article – Annual report year: 2017

A Cascading Model Of An Active Magnetic Regenerator System
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Active magnetic regenerator refrigeration with rotary multi-bed technology

A detailed study of the hysteresis in La$_{0.67}$Ca$_{0.33}$MnO$_3$
Research output: Research - peer-review › Journal article – Annual report year: 2016

Ceramic tape casting: A review of current methods and trends with emphasis on rheological behaviour and flow analysis
Research output: Research - peer-review › Review – Annual report year: 2016

Challenges in going from 2nd order to 1st order materials in magnetic refrigeration devices
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Comparing superconducting and permanent magnets for magnetic refrigeration
Research output: Research - peer-review › Journal article – Annual report year: 2016
Development of a novel rotary magnetic refrigerator
Research output: Research - peer-review › Journal article – Annual report year: 2016

Effects of flow balancing on active magnetic regenerator performance
Research output: Research - peer-review › Journal article – Annual report year: 2016

Effects of surface finish and mechanical training on Ni-Ti sheets for elastocaloric cooling
Research output: Research - peer-review › Journal article – Annual report year: 2016

Epoxy-bonded $\text{La(Fe,mn,si)}_{13}H_x$ As A Multi Layered Active Magnetic Regenerator
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

From a magnet to a heat pump
Research output: Research - peer-review › Journal article – Annual report year: 2016

Generating the optimal magnetic field for magnetic refrigeration
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Globally Optimal Segmentation of Permanent-Magnet Systems
Research output: Research - peer-review › Journal article – Annual report year: 2016

Magnetocaloric materials and first order phase transitions

Magneto-elastic coupling in $\text{La(Fe, Mn, Si)}_{13}H_y$ within the Bean-Rodbell model
Research output: Research - peer-review › Journal article – Annual report year: 2016

Nonuniversal scaling of the magnetocaloric effect as an insight into spin-lattice interactions in manganites
Research output: Research - peer-review › Journal article – Annual report year: 2016

Optimally segmented magnetic structures
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Optimising Magnetostatic Assemblies

Optimization of Multi-layer Active Magnetic Regenerator towards Compact and Efficient Refrigeration
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Performance of Halbach magnet arrays with finite coercivity
Research output: Research - peer-review › Journal article – Annual report year: 2016

Strain development during the phase transition of $\text{La(Fe,Mn, Si)}_{13}H_z$
Research output: Research - peer-review › Journal article – Annual report year: 2016

Study of multi-layer active magnetic regenerators using magnetocaloric materials with first and second order phase transition: Paper
Research output: Research - peer-review › Journal article – Annual report year: 2016
The effect of tape casting operational parameters on the quality of adjacently graded ceramic film
Research output: Research - peer-review › Journal article – Annual report year: 2016

The lifetime cost of a magnetic refrigerator
Research output: Research - peer-review › Journal article – Annual report year: 2015

An active magnetic regenerator device
Research output: Research › Patent – Annual report year: 2015

System for cooling a cabinet
Research output: Research › Patent – Annual report year: 2015

Comparing superconducting and permanent magnets for magnetic refrigeration
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Design and experimental tests of a rotary active magnetic regenerator prototype
Research output: Research - peer-review › Journal article – Annual report year: 2015

Direct measurements of the magnetic entropy change
Research output: Research - peer-review › Journal article – Annual report year: 2015

Dynamic rotor mode in antiferromagnetic nanoparticles
Research output: Research - peer-review › Journal article – Annual report year: 2015

Effect of Temperature Step Size on Calculating the Magnetic Entropy Change
Research output: Research › Conference abstract for conference – Annual report year: 2015

Experimental Studies with an Active Magnetic Regenerating Refrigerator
Research output: Research › Article in proceedings – Annual report year: 2015

Functionally Graded Ceramics Fabricated with Side-by-Side Tape Casting for Use in Magnetic Refrigeration
Research output: Research - peer-review › Journal article – Annual report year: 2014

Influence of manganite powder grain size and Ag-particle coating on the magnetocaloric effect and the active magnetic regenerator performance
Research output: Research - peer-review › Journal article – Annual report year: 2015

Magnetocaloric effect and H gradient in bulk La(Fe,Si)13Hy magnetic refrigerants obtained by HDSH
Research output: Research - peer-review › Journal article – Annual report year: 2015

Magnetostriiction and magnetisation in $La_{0.67}Ca_{0.33}MnO_3$ within the Bean-Rodbell framework
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Numerical Simulation of a Tapered Bed AMR
Research output: Research › Poster – Annual report year: 2015

Optimization of Permanent Magnet Assemblies
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Optimization of Permanent Magnet Assemblies
Research output: Research › Poster – Annual report year: 2015
Percolative nature of A-site disordered La$_{0.75}$Ce$_{0.25-x}$Sr$_x$MnO$_3$ manganites
Research output: Research - peer-review › Journal article – Annual report year: 2015

Sensitivity study of multi-layer active magnetic regenerators using first order magnetocaloric material La(Fe,Mn,Si)$_{13}H_y$
Research output: Research - peer-review › Journal article – Annual report year: 2015

Study of Multi-layer Active Magnetic Regenerators Using Magnetocaloric Materials with First and Second Order Phase Transition
Research output: Research - peer-review › Poster – Annual report year: 2015

The efficiency and the demagnetization field of a general Halbach cylinder
Research output: Research - peer-review › Journal article – Annual report year: 2015

The influence of hysteresis on the determination of the magnetocaloric effect in Gd$_5$Si$_2$Ge$_2$
Research output: Research - peer-review › Journal article – Annual report year: 2015

The Total Lifetime Cost of a Magnetic Refrigerator
Research output: Research - peer-review › Poster – Annual report year: 2015

Ultrafast microwave hydrothermal synthesis and characterization of Bi$_{1-x}$La$_x$FeO$_3$ micronized particles
Research output: Research - peer-review › Journal article – Annual report year: 2015

An evaluation of interface capturing methods in a VOF based model for multiphase flow of a non-Newtonian ceramic in tape casting
Research output: Research - peer-review › Journal article – Annual report year: 2014

A Preisach approach to modeling partial phase transitions in the first order magnetocaloric material MnFe(P,As)
Research output: Research - peer-review › Journal article – Annual report year: 2014

Demagnetizing fields in active magnetic regenerators
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Design and Initial testing of a compact and efficient rotary AMR prototype
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Developing a Magnetocaloric Domestic Heat Pump
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Development and experimental results from a 1 kW prototype AMR
Research output: Research - peer-review › Journal article – Annual report year: 2014

Direct measurements of the magnetocaloric effect
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Experimental and numerical results of a high frequency rotating active magnetic refrigerator
Research output: Research - peer-review › Journal article – Annual report year: 2014

Experimental investigation of the effect of thermal hysteresis in first order material MnFe(P,As) applied in an AMR device
Research output: Research - peer-review › Journal article – Annual report year: 2014
Experimental Tape Casting of Adjacently Graded Materials for Magnetic Refrigeration
Research output: Research › Ph.D. thesis – Annual report year: 2014

Finite element modeling of camber evolution during sintering of bi-layers
Research output: Research › peer-review › Journal article – Annual report year: 2014

Hysteresis in Magnetocalaric Materials: An experimental and modelling approach
Research output: Research › Ph.D. thesis – Annual report year: 2014

Magnetocaloric heat pump device, a heating or cooling system and a magnetocaloric heat pump assembly
Research output: Research › Patent – Annual report year: 2014

Modeling of in-vehicle magnetic refrigeration
Research output: Research › peer-review › Journal article – Annual report year: 2014

Modelling and comparison studies of packed screen regenerators for active magnetocaloric refrigeration
Research output: Research › peer-review › Article in proceedings – Annual report year: 2014

Performance-oriented Analysis of a Hybrid magnetic Assembly for a Heat-pump Magnetocaloric Device
Research output: Research › peer-review › Article in proceedings – Annual report year: 2014

Quantification of the effect of hysteresis on the adiabatic temperature change in magnetocaloric materials
Research output: Research › peer-review › Article in proceedings – Annual report year: 2014

Scaling and universality in magnetocaloric materials
Research output: Research › peer-review › Journal article – Annual report year: 2014

Some Aspects of Scaling and Universality in Magnetocaloric Materials
Research output: Research › peer-review › Article in proceedings – Annual report year: 2014

The Effect of Magnetic Domains on the Measurement of the Magnetocaloric effect
Research output: Research › peer-review › Article in proceedings – Annual report year: 2014

The influence of non-magnetocaloric properties on the performance in parallel-plate AMRs
Research output: Research › peer-review › Journal article – Annual report year: 2014

Thermal hysteretic behaviour of La_{0.67}Ca_{0.33}MnO_3
Research output: Research › peer-review › Article in proceedings – Annual report year: 2014

Thickness control and interface quality as functions of slurry formulation and casting speed in side-by-side tape casting
Research output: Research › peer-review › Journal article – Annual report year: 2014

Demagnetization factor for a powder of randomly packed spherical particles
Research output: Research › peer-review › Journal article – Annual report year: 2013

Improved modelling of a parallel plate active magnetic regenerator
Research output: Research › peer-review › Journal article – Annual report year: 2013

Magnetisk køling - køleteknologi med en varm fremtid
Research output: Communication › Journal article – Annual report year: 2013
Material properties and modeling characteristics for MnFeP\(_{1-x}\)As\(_x\) materials for application in magnetic refrigeration
Research output: Research - peer-review › Journal article – Annual report year: 2013

Metamaterial anisotropic flux concentrators and magnetic arrays
Research output: Research - peer-review › Journal article – Annual report year: 2013

Performance analysis of a rotary active magnetic refrigerator
Research output: Research - peer-review › Journal article – Annual report year: 2013

Quasi-steady state power law model for flow of (La\(_{0.85}\)Sr\(_{0.15}\))\(_{0.9}\)MnO\(_3\) ceramic slurry in tape casting
Research output: Research - peer-review › Journal article – Annual report year: 2013

The effect of flow maldistribution in heterogeneous parallel-plate active magnetic regenerators
Research output: Research - peer-review › Journal article – Annual report year: 2013

The influence of flow maldistribution on the performance of inhomogeneous parallel plate heat exchangers
Research output: Research - peer-review › Journal article – Annual report year: 2013

The Variation of Interface Formation with Slurry Viscosity Change in Side-By-Side Tape Casting
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Utilizing Materials With Controllable Curie Temperatures for Magnetic Actuation Purposes
Research output: Research - peer-review › Journal article – Annual report year: 2013

A novel magnetic valve using room temperature magnetocaloric materials
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Broadening of the magnetic entropy change in La\(_{0.75}\)Ca\(_{0.15}\)Sr\(_{0.10}\)MnO\(_3\)
Research output: Research - peer-review › Journal article – Annual report year: 2011

Degradation of the performance of microchannel heat exchangers due to flow maldistribution
Research output: Research - peer-review › Journal article – Annual report year: 2012

Development and Experimental Results from a 1 kW Prototype AMR
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Experimental and numerical results of a high frequency rotating active magnetic refrigerator
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Experimental investigation of the effect of thermal hysteresis in MnFeP\(_{1-x}\)As\(_x\) materials applied in an AMR device
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Experimental results for a novel rotary active magnetic regenerator
Research output: Research - peer-review › Journal article – Annual report year: 2012

Experiments on a modular magnetic refrigeration device
Research output: Research - peer-review › Journal article – Annual report year: 2012

High performance magnetocaloric perovskites for magnetic refrigeration
Research output: Research - peer-review › Journal article – Annual report year: 2012
Interface Oscillation in the Side-by-Side (SBS) Tape Casting of Functionally Graded Ceramics (FGCs)
Research output: Research › Conference abstract in journal – Annual report year: 2012

Magnetic refrigeration – and heating
Research output: Research › Sound/Visual production (digital) – Annual report year: 2012

Materials Challenges for High Performance Magnetocaloric Refrigeration Devices
Research output: Research › Conference article – Annual report year: 2012

Modeling of In-vehicle Magnetic refrigeration
Research output: Research › Article in proceedings – Annual report year: 2012

Properties of magnetocaloric materials with a distribution of Curie temperatures
Research output: Research › Journal article – Annual report year: 2011

Structure useful for producing a thermoelectric generator, thermoelectric generator comprising same and method for producing same
Research output: Research › Patent – Annual report year: 2013

The influence of demagnetizing effects on the performance of active magnetic regenerators
Research output: Research › Journal article – Annual report year: 2012

The influence of non-magnetocaloric properties on the AMR performance
Research output: Research › Journal article – Annual report year: 2012

Design concepts for a continuously rotating active magnetic regenerator
Research output: Research › Conference article – Annual report year: 2011

Non-Uniform Heat Transfer in Thermal Regenerators
Research output: Research › Ph.D. thesis – Annual report year: 2011

A Magnetic Assembly, a Fluid-Flow Assembly and an Indicator
Research output: Research › Patent – Annual report year: 2011

A Monolithic Perovskite Structure for Use as a Magnetic Regenerator
Research output: Research › Journal article – Annual report year: 2011

Analysis of single blow effectiveness in non-uniform parallel plate regenerators
Research output: Research › Journal article – Annual report year: 2011

Demagnetizing effects in stacked rectangular prisms
Research output: Research › Journal article – Annual report year: 2011

Determining the minimum mass and cost of a magnetic refrigerator
Research output: Research › Journal article – Annual report year: 2011

Experimental results for a magnetic refrigerator using three different types of magnetocaloric material regenerators
Research output: Research › Journal article – Annual report year: 2011

Improving Magnet Designs With High and Low Field Regions
Research output: Research › Journal article – Annual report year: 2011
Magnetic refrigeration at room temperature - from magnetocaloric materials to a prototype
Research output: Research - peer-review › Conference article – Annual report year: 2011

Measuring the effect of demagnetization in stacks of gadolinium plates using the magnetocaloric effect
Research output: Research - peer-review › Journal article – Annual report year: 2011

Review on numerical modeling of active magnetic regenerators for room temperature applications
Research output: Research - peer-review › Journal article – Annual report year: 2011

Spin reorientation in α-Fe2O3 nanoparticles induced by interparticle exchange interactions in alpha-Fe2O3/NiO nanocomposites
Research output: Research - peer-review › Journal article – Annual report year: 2012

Structural, magnetic and magnetocaloric properties of Heusler alloys Ni50Mn38Sb12 with boron addition
Research output: Research - peer-review › Journal article – Annual report year: 2011

A comprehensive parameter study of an active magnetic regenerator using a 2D numerical model
Research output: Research - peer-review › Journal article – Annual report year: 2010

Analysis of the magnetic field, force, and torque for two-dimensional Halbach cylinders
Research output: Research - peer-review › Journal article – Annual report year: 2010

An optimized magnet for magnetic refrigeration
Research output: Research - peer-review › Journal article – Annual report year: 2010

A Parallel Magnetic Refrigerator Assembly and a Method of Refrigerating
Research output: Research › Patent – Annual report year: 2010

A Refrigeration Device and Method of Refrigerating
Research output: Research › Patent – Annual report year: 2010

Comparison of adjustable permanent magnetic field sources
Research output: Research - peer-review › Journal article – Annual report year: 2010

Consequences of the magnetocaloric effect on magnetometry measurements
Research output: Research - peer-review › Journal article – Annual report year: 2010

Constraints on the Adiabatic Temperature Change In Magnetocaloric Materials
Research output: Research - peer-review › Journal article – Annual report year: 2010

Design Concepts for a Continuously Rotating Active Magnetic Regenerator
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Evaluating the effect of magnetocaloric properties on magnetic refrigeration performance
Research output: Research - peer-review › Journal article – Annual report year: 2010

Gd3Fe5O12 near the compensation temperature
Research output: Research › Conference abstract in proceedings – Annual report year: 2010
Magnetic entropy and cooling
Research output: Research › Conference abstract in proceedings – Annual report year: 2010

Magnetocaloric properties of LaFe$_{13-x-y}$Co$_x$Si$_y$ and commercial grade Gd
Research output: Research - peer-review › Journal article – Annual report year: 2010

Modeling of parallel-plate regenerators with non-uniform plate distributions
Research output: Research - peer-review › Journal article – Annual report year: 2010

Numerical modeling of graded active magnetic regenerators
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Properties of magnetocaloric La(Fe,Co,Si)$_{13}$ produced by powder metallurgy
Research output: Research - peer-review › Journal article – Annual report year: 2010

Review and comparison of magnet designs for magnetic refrigeration
Research output: Research - peer-review › Journal article – Annual report year: 2010

Spatially resolved measurements of the magnetocaloric effect and the local magnetic field using thermography
Research output: Research - peer-review › Journal article – Annual report year: 2010

Structural and magnetic properties of Gd/Fe multilayers grown by pulsed laser deposition
Research output: Research - peer-review › Journal article – Annual report year: 2010

The demagnetizing field of a non-uniform rectangular prism
Research output: Research - peer-review › Journal article – Annual report year: 2010

The persistence of the magnetocaloric effect in (La$_{1-x}$)A$_x$(0.67)Ba$_{0.33}$Mn$_{1.05}$O$_{3-\delta}$
Research output: Research - peer-review › Journal article – Annual report year: 2010

2-dimensional numerical modeling of active magnetic regeneration
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Active Magnetic Regenerative Refrigeration
Research output: Research › Poster – Annual report year: 2009

Characterization study of a plate of the magnetocaloric material La(Fe,Co,Si)$_{13}$
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Detailed numerical modeling of a linear parallel-plate Active Magnetic Regenerator
Research output: Research - peer-review › Journal article – Annual report year: 2009

Do simple magnetic refrigeration test devices lead to more successful prototypes?
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Experiments on a Modular Magnetic Refrigeration Device
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Magnetic cooling at Risoe DTU
Research output: Research › Journal article – Annual report year: 2009
Magnetic Refrigeration – an Energy Efficient Technology for the Future
Research output: Research › Article in proceedings – Annual report year: 2009

Magnetisk køling
Research output: Communication › Conference abstract for conference – Annual report year: 2009

Magnetism and magnetocaloric effect in LaFe11.9-xCoxSi1.1
Research output: Research › Poster – Annual report year: 2009

Magnetocaloric effect in (La1-xAx)2/3Ba1/3Mn1.05O3-δ
Research output: Research › Poster – Annual report year: 2009

Numerical modeling in magnetic refrigeration
Research output: Research › Article in proceedings – Annual report year: 2009

Numerical Modeling of Multi-Material Active Magnetic Regeneration
Research output: Research › Article in proceedings – Annual report year: 2009

On the optimal magnet design for magnetic refrigeration
Research output: Research › peer-review › Article in proceedings – Annual report year: 2009

Structural and magnetic properties of Gd/Fe multilayers grown by pulsed laser deposition
Research output: Research › peer-review › Poster – Annual report year: 2009

Study of a plate of the magnetocaloric material La(Fe,Co,Si)13
Research output: Research › Poster – Annual report year: 2009

The effect of demagnetization on the magnetocaloric properties of gadolinium
Research output: Research › peer-review › Journal article – Annual report year: 2009

A versatile magnetic refrigeration test device
Research output: Research › peer-review › Journal article – Annual report year: 2008

Avoided crossing of rattler modes in thermoelectric materials
Research output: Research › peer-review › Journal article – Annual report year: 2008

Comparison between a 1D and a 2D numerical model of an active magnetic regenerative refrigerator
Research output: Research › peer-review › Journal article – Annual report year: 2008

Magnetic Cooling at Risø DTU
Research output: Research › peer-review › Article in proceedings – Annual report year: 2008

New dynamical mode in magnetic nanoparticles
Research output: Research › Conference abstract for conference – Annual report year: 2008

Optimization and improvement of Halbach cylinder design
Research output: Research › peer-review › Journal article – Annual report year: 2008

Uniform spin wave modes in antiferromagnetic nanoparticles with uncompensated moments
Research output: Research › peer-review › Journal article – Annual report year: 2008
A numerical analysis of a reciprocating Active Magnetic Regenerator with a parallel-plate regenerator geometry
Research output: Research - peer-review › Article in proceedings – Annual report year: 2007

A purely dynamic phase of small Hematite nanoparticles
Research output: Research › Conference abstract for conference – Annual report year: 2007

Experimental and theoretical studies of nanoparticles of antiferromagnetic materials
Research output: Research - peer-review › Journal article – Annual report year: 2007

Magnetic cooling for use in refrigerators
Research output: Research › Conference abstract for conference – Annual report year: 2007

Nano size crystals of goethite, alpha-FeOOH: Synthesis and thermal transformation
Research output: Research - peer-review › Journal article – Annual report year: 2007

Neutroener udfritter nanopartikler
Research output: Communication › Journal article – Annual report year: 2007

The magnetic properties of antiferromagnetic nanoparticles: NiO and α-Fe2O3
Research output: Research › Ph.D. thesis – Annual report year: 2006

Inelastic neutron scattering experiments with the monochromatic imaging mode of the RITA-II spectrometer
Research output: Research - peer-review › Journal article – Annual report year: 2006

Neutron study of magnetic excitations in 8-nmFe2O3 nanoparticles
Research output: Research - peer-review › Journal article – Annual report year: 2006

Realizing the full potential of a RITA spectrometer
Research output: Research - peer-review › Conference article – Annual report year: 2006

Spin dynamics in weakly and strongly interacting NiO nanoparticles
Research output: Research - peer-review › Journal article – Annual report year: 2006

The magnetic moment of NiO nanoparticles determined by Mössbauer spectroscopy
Research output: Research - peer-review › Journal article – Annual report year: 2006

The magnetic properties of antiferromagnetic nanoparticles: NiO and α-Fe2O3
Research output: Research › Ph.D. thesis – Annual report year: 2006

Uniform magnetic excitations in NiO nanoparticles
Research output: Research - peer-review › Conference article – Annual report year: 2006

Varying the exchange interaction between NiO nanoparticles
Research output: Research - peer-review › Journal article – Annual report year: 2006

Ordered magnetic structures without Bragg reflections - isotropic spin relaxation in magnetic nanoparticles
Research output: Research › Conference abstract in proceedings – Annual report year: 2005

Ordered magnetic structures without Bragg reflections - surprises from nanomagnetism
Research output: Research › Conference abstract for conference – Annual report year: 2005
Oriented attachment and exchange coupling of α-Fe₂O₃ nanoparticles
Research output: Research - peer-review › Journal article – Annual report year: 2005

Realizing the full potential of a RITA spectrometer
Research output: Research › Conference abstract in proceedings – Annual report year: 2005

The Rattler effect in thermoelectric materials
Research output: Research › Conference abstract in proceedings – Annual report year: 2005

Uniform magnetic excitations in NiO nanoparticles
Research output: Research › Conference abstract for conference – Annual report year: 2005

Uniform magnetic excitations in NiO nanoparticles
Research output: Research › Conference abstract in proceedings – Annual report year: 2005

Developments in neutron instrumentation for the study of magnetic nanoparticles
Research output: Research › Conference abstract for conference – Annual report year: 2004

Exchange interactions between antiferromagnetic nanoparticles or in core-shell nanoparticles (invited lecture)
Research output: Research › Conference abstract for conference – Annual report year: 2004

Interparticle interactions in agglomerates of α-Fe₂O₃ nanoparticles: Influence of grinding
Research output: Research - peer-review › Journal article – Annual report year: 2004

Interparticle interactions studied by neutron scattering
Research output: Research › Conference abstract for conference – Annual report year: 2004

Magnetic anisotropy and quantized spin waves in hematite nanoparticles
Research output: Research - peer-review › Journal article – Annual report year: 2004

The monochromatic imaging mode of a RITA-type neutron spectrometer
Research output: Research - peer-review › Journal article – Annual report year: 2004

Projects:

Harvesting Energy with Levitating Magnets
Project: PhD

The Effect of Non-magnetic Properties on Active Magnetic Regeberator Performance
Project: PhD

Getting the most out of magnetocaloric materials for high efficiency refrigeration
Project: PhD

Active Magnetic regenerator refrigeration with rotary multi-bed technology
Project: PhD

Improving the efficiency of heat pump and cooling technologies
Project: PhD
Magnetiske Nanopartikler og Nanokompositmaterialer
Project: PhD

Development and processing of p-type oxide thermoelectric materials
Project: PhD

Experimental Tape Casting of Adjacently Graded Materials for Magnetic Refrigeration
Project: PhD

Magnetocaloric regenerator design
Project: PhD

Modeling of Active Magnetic Regenerators for Magnetic Refrigeration at Room Temperature
Project: PhD

Modeling and development of permanent magnets for magnetic refrigeration at room temperature
Project: PhD

Development of Ceramic Materials for Magnetic Refrigeration at Room Temperature
Project: PhD

Active Cooling of a Down Hole Well Tractor
Project: PhD

High performance Magnetocaloric Materials
Project: PhD

Optimised Hybrid Magnets
Project: PhD

Nano-Structures of Organic-based photovoltaic Cells
Project: PhD

Modelling environmentally friendly materials for magnetic refrigeration
Project: PhD

Activities:

7th International Conference on Magnetic Refrigeration at Room Temperature (Thermag VII)
Activity: Talks and presentations › Conference presentations

Trends and frontiers in solid state energy conversion - materials and technologies
Activity: Talks and presentations › Conference presentations

Challenges in Going from 2nd Order to 1st Order Materials in Magnetic Refrigeration Devices
Activity: Talks and presentations › Conference presentations

Delft Days on Magnetocalorics 2015
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.
Rare earth-transitional metal oxides and compounds for environment-friendly energy science and technology
Activity: Talks and presentations › Conference presentations

Workshop on Advancing Caloric Materials for Efficient Cooling
Activity: Talks and presentations › Conference presentations

Magnetic Materials and Applications seminar
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

6th IIR/IIF International Conference on Magnetic Refrigeration
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Design and optimisation of permanent magnet systems for magnetic refrigeration
Activity: Talks and presentations › Conference presentations

From magnetocaloric materials to magnetic refrigeration devices
Activity: Talks and presentations › Conference presentations

The challenges in going from magnetocaloric materials to magnetic refrigeration devices
Activity: Talks and presentations › Conference presentations

Identifying Ways to Improve the Efficiency of Magnetocaloric Devices
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Mixed Rare Earth-Fe-B sintered magnets
Activity: Talks and presentations › Conference presentations

5th IIF-IIR International Conference on Magnetic Refrigeration at Room Temperature
Activity: Talks and presentations › Conference presentations

Development and Experimental Results from a 1kW Prototype AMR
Activity: Talks and presentations › Conference presentations

Magnetic refrigeration at Risø DTU
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

Foredrag om brændselsceller
Activity: Talks and presentations › Conference presentations