Henning Friis Poulsen - DTU Orbit (04/02/2018)

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Neutrons and X-rays for Materials Physics

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Publications:

A spectral geometric model for Compton single scatter in PET based on the single scatter simulation approximation: Paper
Publication: Research - peer-review › Journal article – Annual report year: 2018

HIGH PRECISION COMPUTED TOMOGRAPHY FOR METROLOGY
Publication: Research › Patent – Annual report year: 2017

A METHOD OF SECURITY SCANNING OF CARRY-ON ITEMS, AND A CARRY-ON ITEMS SECURITY SCANNING SYSTEM
Publication: Research › Patent – Annual report year: 2017

Determining material parameters using phase-field simulations and experiments
Publication: Research - peer-review › Journal article – Annual report year: 2017

Simulating and optimizing compound refractive lens-based X-ray microscopes
Publication: Research - peer-review › Journal article – Annual report year: 2017

Ultra-low-angle boundary networks within recrystallizing grains
Publication: Research - peer-review › Journal article – Annual report year: 2017

X-ray diffraction microscopy based on refractive optics
Publication: Research - peer-review › Journal article – Annual report year: 2017

Advanced microstructural analysis of cyclically deforming metallic materials towards lifetime improvement
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

A multiple length scale description of the mechanism of elastomer stretching
Publication: Research - peer-review › Journal article – Annual report year: 2016

A Spectral Geometrical Model for Compton Scatter Tomography Based on the SSS Approximation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

DanMAX - The Danish beamline for in situ materials studies at MAX IV
Publication: Research › Poster – Annual report year: 2016

Full-field hard x-ray microscopy with interdigitated silicon lenses
Publication: Research - peer-review › Journal article – Annual report year: 2016
Multigrain indexing of unknown multiphase materials
Publication: Research - peer-review › Journal article – Annual report year: 2016

Multiscale 3D characterization with dark-field x-ray microscopy
Publication: Research - peer-review › Journal article – Annual report year: 2016

Noise robustness of a combined phase retrieval and reconstruction method for phase-contrast tomography
Publication: Research - peer-review › Journal article – Annual report year: 2016

Quantifying the onset of recrystallization in deformed metals using x-rays
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Dark-field X-ray microscopy for multiscale structural characterization
Publication: Research - peer-review › Journal article – Annual report year: 2015

Dark field X-ray microscopy for studies of recrystallization
Publication: Research - peer-review › Conference article – Annual report year: 2015

Generalized balanced power diagrams for 3D representations of polycrystals
Publication: Research - peer-review › Journal article – Annual report year: 2015

Injection molded polymeric hard X-ray lenses
Publication: Research - peer-review › Journal article – Annual report year: 2015

Microfabrication and testing of refractive hard X-ray optics
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Microfabrication of hard x-ray lenses
Publication: Research › Ph.D. thesis – Annual report year: 2016

Optimizing shape uniformity and increasing structure heights of deep reactive ion etched silicon x-ray lenses: Paper
Publication: Research - peer-review › Journal article – Annual report year: 2015

Polymer injection molding of hard X-ray refractive optics
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Sacrificial structures for deep reactive ion etching of high-aspect ratio kinoform silicon x-ray lenses
Publication: Research - peer-review › Journal article – Annual report year: 2015

Three-dimensional nanometrology of microstructures by replica molding and large-range atomic force microscopy
Publication: Research - peer-review › Journal article – Annual report year: 2015

3D -Ray Diffraction Microscopy
Publication: Research - peer-review › Book chapter – Annual report year: 2015

Efficient Analytical Approaches to the Optics of Compound Refractive Lenses for Use with Synchrotron X-rays
Publication: Research - peer-review › Journal article – Annual report year: 2014

Full 3D characterization of high aspect ratio microstructures
Publication: Research - peer-review › Poster – Annual report year: 2014
Evolution of dislocation structures following a change in loading conditions studied by in situ high resolution reciprocal space mapping
Publication: Research › Ph.D. thesis – Annual report year: 2011

Grain-resolved elastic strains in deformed copper measured by three-dimensional X-ray diffraction
Publication: Research - peer-review › Journal article – Annual report year: 2011

Measuring the stress field around an evolving crack in tensile deformed Mg AZ31 using 3DXRD grain centre mapping
Publication: Research › Conference abstract for conference – Annual report year: 2011

Measuring the stress field around an evolving crack in tensile deformed Mg AZ31 using 3DXRD grain centre mapping
Publication: Research › Conference abstract for conference – Annual report year: 2011

On the Use of Laguerre Tessellations for Representations of 3D Grain Structures
Publication: Research - peer-review › Journal article – Annual report year: 2010

Simultaneous X-ray diffraction from multiple single crystals of macromolecules
Publication: Research - peer-review › Journal article – Annual report year: 2011

Three-Dimensional Orientation Mapping in the Transmission Electron Microscope
Publication: Research - peer-review › Journal article – Annual report year: 2011

3D grain reconstruction from Boxscan data
Publication: Research - peer-review › Conference article – Annual report year: 2010

3DXRD measurements of lattice rotations in tensile deformed IF steel
Publication: Research - peer-review › Conference article – Annual report year: 2010

4D characterization of metals by 3DXRD
Publication: Research - peer-review › Conference article – Annual report year: 2010

Advances in characterization of deformation structures by high resolution reciprocal space mapping
Publication: Research - peer-review › Conference article – Annual report year: 2010

A new principle of orientation determination for 3D electron diffraction microscopy
Publication: Research - peer-review › Conference article – Annual report year: 2010

Challenges in materials science and possibilities in 3D and 4D characterization techniques. Proceedings of the 31st Risø International Symposium on Materials Science
Publication: Research - peer-review › Book – Annual report year: 2010

DART: a robust algorithm for fast reconstruction of three-dimensional grain maps
Publication: Research - peer-review › Journal article – Annual report year: 2010

Determining grain resolved stresses in polycrystalline materials using three-dimensional X-ray diffraction
Publication: Research - peer-review › Journal article – Annual report year: 2010

Grain resolved stresses in polycrystalline materials from 3DXRD data
Publication: Research › Conference abstract for conference – Annual report year: 2010
Mapping the stresses of individual grains in a polycrystalline material using 3DXRD
Publication: Research › Conference abstract for conference – Annual report year: 2010

Measuring type II stresses using 3DXRD
Publication: Research › Conference article – Annual report year: 2010

Measuring type-II stresses using 3XRD
Publication: Research › Poster – Annual report year: 2010

Phase retrieval for superposed signals from multiple binary objects
Publication: Research › Journal article – Annual report year: 2010

The extension of ID11 for nanoscale and hierarchical characterization
Publication: Research › Conference article – Annual report year: 2010

4D studies in materials science
Publication: Research › Paper – Annual report year: 2009

A discrete spherical X-ray transform of orientation distribution functions using bounding cubes
Publication: Research › Journal article – Annual report year: 2009

A greedy method for reconstructing polycrystals from three-dimensional X-ray diffraction data
Publication: Research › Journal article – Annual report year: 2009

Case for studies of bulk materials at XFEL?
Publication: Research › Conference abstract for conference – Annual report year: 2009

Closing the gap between single crystal and powder diffraction
Publication: Research › Paper – Annual report year: 2009

Computer simulation of electron nanodiffraction patterns from overlapping grains
Publication: Research › Conference article – Annual report year: 2009

Direct non-destructive observation of bulk nucleation in 30% deformed aluminum
Publication: Research › Journal article – Annual report year: 2009

Evolution of deformation structures under varying loading conditions followed in situ by high angular resolution 3DXRD
Publication: Research › Conference abstract in proceedings – Annual report year: 2009

Evolution of Deformation Structures under Varying Loading Conditions Followed In-Situ by High Angular Resolution 3DXRD
Publication: Research › Conference abstract for conference – Annual report year: 2009

Integrated intensities based on grain orientation distribution functions
Publication: Research › Paper – Annual report year: 2009

Mapping the elastic strains of individual grains in a polycrystalline material using 3DXRD
Publication: Research › Conference abstract for conference – Annual report year: 2009

Mapping the elastic strains of individual grains in a polycrystalline material using 3DXRD
Publication: Research › Conference abstract for conference – Annual report year: 2009
Measuring residual stresses of individual grains in polycrystalline materials using 3DXRD
Publication: Research › Conference abstract for conference – Annual report year: 2009

Measuring the elastic strain of individual grains in a polycrystalline material - extending a micro-scale technique to the nano-regime
Publication: Research - peer-review › Conference article – Annual report year: 2009

Measuring the elastic strain of individual grains in polycrystalline materials
Publication: Research › Sound/Visual production (digital) – Annual report year: 2009

Measuring the elastic strain of individual grains in polycrystalline materials
Publication: Research › Sound/Visual production (digital) – Annual report year: 2009

Multigrain crystallography - why bother?
Publication: Research › Conference abstract for conference – Annual report year: 2009

New opportunities for 3D materials science of polycrystalline materials at the micrometre lengthscale by combined use of X-ray diffraction and X-ray imaging
Publication: Research - peer-review › Journal article – Annual report year: 2009

Overview of TotalCryst
Publication: Research › Conference abstract for conference – Annual report year: 2009

Reconstruction of Single-Grain Orientation Distribution Functions for Crystalline Materials
Publication: Research - peer-review › Journal article – Annual report year: 2009

Stability of dislocation structures in copper towards stress relaxation investigated by high angular resolution 3D X-ray diffraction
Publication: Research - peer-review › Journal article – Annual report year: 2009

Strip detector for nanoscale resolution
Publication: Research › Sound/Visual production (digital) – Annual report year: 2009

Structured scintillators for X-ray imaging with micrometre resolution
Publication: Research - peer-review › Journal article – Annual report year: 2009

The 3D X-ray microscope
Publication: Research › Paper – Annual report year: 2009

The effect of strain path change on subgrain volume fraction determined from in situ X-ray measurements
Publication: Research › Conference article – Annual report year: 2009

X-ray imaging methods for mapping orientations and strains in grains
Publication: Research › Conference abstract for conference – Annual report year: 2009

3D x-ray diffraction microscope
Publication: Research - peer-review › Book chapter – Annual report year: 2008

A high-spatial-resolution three-dimensional detector array for 30-200 keV X-rays based on structured scintillators
Publication: Research - peer-review › Journal article – Annual report year: 2008
Direct observation of 3-D grain growth in Al–0.1% Mn
Publication: Research - peer-review › Journal article – Annual report year: 2008

Direct observation of strain in bulk subgrains and dislocation walls by high angular resolution three-dimensional X-ray diffraction
Publication: Research - peer-review › Conference article – Annual report year: 2008

In-Situ Observations of Subgrain Dynamics by High Energy X-Ray Diffraction
Publication: Research › Conference abstract in proceedings – Annual report year: 2008

In situ study of the evolution of dislocation structures during strain path changes
Publication: Research › Conference abstract in proceedings – Annual report year: 2008

Measuring the elastic strain of individual grains in polycrystalline materials
Publication: Research › Sound/Visual production (digital) – Annual report year: 2008

Novel synchrotron based techniques for characterization of energy materials
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

Reconstruction of Single-Grain Orientation Distribution Functions for Crystalline Materials
Publication: Research › Report – Annual report year: 2008

Single Grain Characterization Techniques at the APS 1-ID Beamline
Publication: Research › Conference abstract in proceedings – Annual report year: 2008

Subgrains observed by high energy X-ray diffraction during in-situ loading
Publication: Research › Conference abstract in proceedings – Annual report year: 2008

Synchrotron radiation: A powerful tool for probing superconducting/metal composite wires and tapes
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

Three-dimensional materials science: An intersection of three-dimensional reconstructions and simulations
Publication: Research - peer-review › Editorial – Annual report year: 2008

Three-dimensional materials science: An intersection of three-dimensional reconstructions and simulations
Publication: Research - peer-review › Journal article – Annual report year: 2008

Three-dimensional X-ray diffraction
Publication: Research - peer-review › Book chapter – Annual report year: 2008

X-ray diffraction contrast tomography: a novel technique for three-dimensional grain mapping of polycrystals. 1. Direct beam case
Publication: Research - peer-review › Journal article – Annual report year: 2008

3D characterisation of metal structures and their evolution
Publication: Research › Paper – Annual report year: 2007

3-dimensional characterization of polycrystalline bulk materials using high-energy synchrotron radiation
Publication: Research - peer-review › Conference article – Annual report year: 2006
4D analysis of metal structures
Publication: Research › Paper – Annual report year: 2007

A stochastic algorithm for reconstruction of grain maps of moderately deformed specimens based on X-ray diffraction
Publication: Research - peer-review › Journal article – Annual report year: 2007

Development of a high-efficiency high-resolution imaging detector for 30–60 keV X-rays
Publication: Research - peer-review › Conference article – Annual report year: 2007

Diffraction with high energy X-rays: Synchrotron instrumentation and nano science
Publication: Research › Paper – Annual report year: 2007

Direct determination of elastic strains and dislocation densities in individual subgrains in deformation structures
Publication: Research - peer-review › Journal article – Annual report year: 2007

Discrete tomography for generating maps of polycrystals
Publication: Research - peer-review › Book chapter – Annual report year: 2007

Ferrite formation during slow continuous cooling in steel
Publication: Research - peer-review › Conference article – Annual report year: 2007

High-resolution three-dimensional mapping of individual grains in polycrystals by topotomography
Publication: Research - peer-review › Journal article – Annual report year: 2007

Intermittent subgrain dynamics during plastic deformation monitored by high-angular resolution 3DXRD
Publication: Research › Paper – Annual report year: 2007

Internal strains within individual grains of plastically deformed copper
Publication: Research › Conference abstract in proceedings – Annual report year: 2007

Investigation of the deformation structure in an aluminium magnesium alloy by high angular resolution three-dimensional X-ray diffraction
Publication: Research - peer-review › Journal article – Annual report year: 2007

Mapping polycrystals in 3D and studying their evolution
Publication: Research › Paper – Annual report year: 2007

Plastic deformation monitored in-situ by high angular resolution 3DXRD: New insights and challenges
Publication: Research › Conference abstract in proceedings – Annual report year: 2007

Properties and dynamics of bulk subgrains probed in-situ using a novel X-ray diffraction method
Publication: Research - peer-review › Conference article – Annual report year: 2007

Revealing deformation microstructures
Publication: Research - peer-review › Journal article – Annual report year: 2007

Strain in amorphous materials
Publication: Research › Paper – Annual report year: 2007

Visualizing the dynamics of dislocations structures
Publication: Research › Conference abstract for conference – Annual report year: 2007
A depth-resolved in-situ study of the reduction and oxidation of Ni-based anodes in solid oxide fuel cells
Publication: Research - peer-review › Journal article – Annual report year: 2006

A discrete tomography algorithm for improving the quality of three-dimensional X-ray diffraction grain maps
Publication: Research - peer-review › Journal article – Annual report year: 2006

Asymmetric X-ray peak broadening by individual subgrains (talk)
Publication: Research › Conference abstract in proceedings – Annual report year: 2006

Formation and subdivision of deformation structures
Publication: Research › Conference abstract for conference – Annual report year: 2006

Formation and subdivision of deformation structures during plastic deformation
Publication: Research - peer-review › Journal article – Annual report year: 2006

Formation and subdivision of deformation structures (poster)
Publication: Research › Conference abstract in proceedings – Annual report year: 2006

Grain maps and grain dynamics - a reconstruction challenge (invited talk)
Publication: Research › Conference abstract for conference – Annual report year: 2006

Grain nucleation and grain growth during phase transformations in steel
Publication: Research › Conference abstract in proceedings – Annual report year: 2006

In-situ observation of individual subgrains by 3DXRD during deformation and recovery
Publication: Research › Article in proceedings – Annual report year: 2006

Mapping grains and their dynamics in three dimensions
Publication: Research - peer-review › Conference article – Annual report year: 2006

Non-destructive characterization of recrystallization kinetics using three-dimensional X-ray diffraction microscopy
Publication: Research - peer-review › Journal article – Annual report year: 2006

Optimized algebraic reconstruction technique for generation of grain maps based on three-dimensional x-ray diffraction (3DXRD)
Publication: Research - peer-review › Journal article – Annual report year: 2006

Peak profile analysis of individual grains within bulk metals under tensile deformation (invited keynote)
Publication: Research › Conference abstract for conference – Annual report year: 2006

Phase transformations in steel studied by 3DXRD microscopy
Publication: Research - peer-review › Conference article – Annual report year: 2006

Properties and dynamics of bulk subgrains probed in-situ using a novel X-ray diffraction method (talk)
Publication: Research › Conference abstract in proceedings – Annual report year: 2006

Ultra-high angular resolution 3DXRD for observing bulk subgrains and their dynamics (talk)
Publication: Research › Conference abstract in proceedings – Annual report year: 2006
Visualizing the dynamics of grains and dislocations structures (invited)
Publication: Research › Conference abstract in proceedings – Annual report year: 2006

X-ray microscopy in four dimensions
Publication: Research - peer-review › Journal article – Annual report year: 2006

Discrete tomographic reconstruction of 2D polycrystal orientation maps from X-ray diffraction projections using Gibbs priors
Publication: Research › Conference article – Annual report year: 2005

3DXRD microscopy for the study of solid-state phase transformation kinetics
Publication: Research - peer-review › Conference article – Annual report year: 2005

Algorithms and instrumentation for generating 3D grain maps in polycrystals by 3DXRD
Publication: Research › Conference abstract for conference – Annual report year: 2005

Characterisation of orientation distributions of individual grains within deformed metals
Publication: Research - peer-review › Journal article – Annual report year: 2005

Discrete tomographic reconstruction of 2D polycrystal orientation maps from X-ray diffraction projections using Gibbs priors
Publication: Research › Conference abstract for conference – Annual report year: 2005

Image analysis for X-ray studies of the dynamics of individual embedded subgrains during recovery
Publication: Research - peer-review › Journal article – Annual report year: 2005

Mapping grains and their dynamics in 3 dimensions
Publication: Research › Conference abstract for conference – Annual report year: 2005

Measuring strains in grains, sub-grains, glasses and polymers (invited talk)
Publication: Research › Conference abstract for conference – Annual report year: 2005

Multiscale study of internal stress and texture in ferroelectrics
Publication: Research - peer-review › Journal article – Annual report year: 2006

Nucleation of recrystallization observed in situ in the bulk of a deformed metal
Publication: Research - peer-review › Journal article – Annual report year: 2005

Resolving ambiguities in reconstructed grain maps using discrete tomography
Publication: Research › Conference abstract for conference – Annual report year: 2005

Resolving ambiguities in reconstructed grain maps using discrete tomography
Publication: Research - peer-review › Conference article – Annual report year: 2005

Total crystallography: 3DXRD for molecular compounds
Publication: Research › Conference abstract for conference – Annual report year: 2005

Ultra-high angular resolution 3DXRD for observing bulk subgrains (poster)
Publication: Research › Poster – Annual report year: 2006

3DXRD - Mapping grains and their dynamics in 3 dimensions
Publication: Research - peer-review › Conference article – Annual report year: 2004
3DXRD – a new probe for materials science
Publication: Research › Doctoral thesis – Annual report year: 2004

3DXRD: Grain maps, grain dynamics and grain refinements
Publication: Research › Peer-review › Journal article – Annual report year: 2004

3DXRD - Mapping polycrystals and their dynamics in 3D
Publication: Research › Conference abstract for conference – Annual report year: 2004

An algebraic algorithm for generation of three-dimensional grain maps based on diffraction with a wide beam of hard X-rays
Publication: Research - Peer-review › Journal article – Annual report year: 2004

Characterising the dynamics of individual embedded dislocation structures
Publication: Research - Peer-review › Journal article – Annual report year: 2004

Direct observation of subgrain evolution during recovery of cold-rolled aluminium
Publication: Research - Peer-review › Journal article – Annual report year: 2004

Emerging order in dislocation structures during metal loading (invited talk)
Publication: Research › Conference abstract for conference – Annual report year: 2004

Evolving microstructures in carbon steel studied by 3DXRD microscopy
Publication: Research › Article in proceedings – Annual report year: 2004

Ferrite nucleation and growth in medium-carbon steel studied by 3DXRD microscopy
Publication: Research › Article in proceedings – Annual report year: 2004

In-situ investigation of bulk nucleation by X-ray diffraction
Publication: Research - Peer-review › Conference article – Annual report year: 2004

In-situ observation of subgrain evolution during static recovery of cold-rolled aluminium
Publication: Research - Peer-review › Conference article – Annual report year: 2004

In situ X-ray peak shape analysis of embedded individual grains during plastic deformation of metals
Publication: Research - Peer-review › Conference article – Annual report year: 2004

Investigating the effect of grain interaction during plastic deformation of copper
Publication: Research - Peer-review › Journal article – Annual report year: 2004

Lattice rotations of individual bulk grains. Part 2: Correlation with initial orientation and model comparison
Publication: Research - Peer-review › Journal article – Annual report year: 2004

Measurement of the components of plastic displacement gradients in three dimensions
Publication: Research - Peer-review › Conference article – Annual report year: 2004
Multicrystal approach to crystal structure solution and refinement  
Publication: Research - peer-review › Journal article – Annual report year: 2005

Observation of dislocation structure evolution by analysis of X-ray peak profiles from individual bulk grains  
Publication: Research › Article in proceedings – Annual report year: 2004

Observation of X-ray peak profiles from individual bulk grains  
Publication: Research › Conference abstract for conference – Annual report year: 2004

Optimization of an algebraic reconstruction technique for generation of grain maps based on diffraction data  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2004

Orientation changes of individual bulk grains during deformation  
Publication: Research - peer-review › Conference article – Annual report year: 2004

Reply to the discussion by Aaronson et al. to "Grain nucleation and growth during phase transformations" by S.E. Offerman et al., Science, 298, 1003 (November 1, 2002)  
Publication: Research - peer-review › Journal article – Annual report year: 2004

Simultaneous measurement of the strain tensor of 10 individual grains embedded in an Al tensile sample  
Publication: Research - peer-review › Conference article – Annual report year: 2004

Solid-state transformations involving solute partitioning: Modeling and measuring on the level of individual grains  
Publication: Research - peer-review › Conference article – Annual report year: 2004

Three-dimensional imaging and analysis of internal dynamics in solid bodies using X-ray micro-tomography (poster)  
Publication: Research › Poster – Annual report year: 2004

Three-dimensional X-ray diffraction (3DXRD) analysis  
Publication: Research › Article in proceedings – Annual report year: 2004

Three-dimensional X-ray diffraction microscopy. Mapping polycrystals and their dynamics  
Publication: Research - peer-review › Book – Annual report year: 2004

Three-dimensional X-ray diffraction microscopy using high-energy X-rays  
Publication: Research - peer-review › Journal article – Annual report year: 2004

3D-characterisation of microstructure evolution during annealing of a deformed aluminum single crystal  
Publication: Research - peer-review › Journal article – Annual report year: 2003

3DXRD - Mapping grains and their dynamics in 3 dimensions  
Publication: Research › Conference abstract for conference – Annual report year: 2003

3DXRD microscopy  
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

3DXRD microscopy (invited talk)  
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

3D-XRD microscopy observations on the processes that determine the metallic microstructure  
Publication: Research › Conference abstract in proceedings – Annual report year: 2003
A reconstruction method for generation of 3D grain maps
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

A six-dimensional approach to microstructure analysis
Publication: Research › peer-review › Journal article – Annual report year: 2003

Charge-density analysis of \( \text{YBa}_2\text{Cu}_3\text{O}_{6.95} \): Comparison of theoretical and experimental results
Publication: Research › peer-review › Journal article – Annual report year: 2003

Generation of grain maps by an algebraic reconstruction technique
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

Grain rotation measurements during plastic deformation of polycrystals
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

In situ characterisation of thermomechanical processes
Publication: Research › Article in proceedings – Annual report year: 2003

In-situ observation of highly strained aluminium microstructure dynamics during annealing by 3DXRD microscopy
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

In situ observations on the mechanical stability of austenite in TRIP-steel
Publication: Research › peer-review › Journal article – Annual report year: 2003

In-situ single grain X-ray peak profile measurements during plastic deformation of metals
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

In-situ single grain X-ray peak profile measurements during plastic deformation of metals
Publication: Research › Conference abstract for conference – Annual report year: 2003

Lattice rotations of individual bulk grains. Part 1: 3D X-ray characterization
Publication: Research › peer-review › Journal article – Annual report year: 2003

Measurements of plastic displacement gradient components in three dimensions using marker particles and synchrotron X-ray absorption microtomography
Publication: Research › peer-review › Journal article – Annual report year: 2003

Non-destructive mapping of grains in three dimensions
Publication: Research › peer-review › Journal article – Annual report year: 2003

Oxygen-ordering superstructures in underdoped \( \text{YBa}_2\text{Cu}_3\text{O}_{6+x} \) studied by hard X-ray diffraction
Publication: Research › peer-review › Journal article – Annual report year: 2003

Reconstruction algorithms at the 3DXRD microscope - an overview
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

Reconstruction of grain boundaries in polycrystals by filtered back-projection of diffraction spots
Publication: Research › peer-review › Journal article – Annual report year: 2003
Recrystallization kinetics of individual bulk grains in 90 % cold-rolled aluminium
Publication: Research - peer-review › Journal article – Annual report year: 2003

Recrystallization kinetics of individual bulk grains in a commercial aluminium alloy
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

Simultaneous measurement of the strain tensor of 10 individual grains embedded in an Al tensile sample
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

Single grain peak profile measurements within bulk metals during tensile deformation
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

Status and perspectives of combined 3D imaging and diffraction experiments at the ESRF
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

Structural refinements of the individual grains within polycrystals and powders
Publication: Research - peer-review › Journal article – Annual report year: 2003

Study of recovery in cold rolled Al using the 3DXRD microscope
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

Superconductivity in an anomalously tetragonal YB$_2$C$_3$O$_{6.62}$ single crystal: A possible singularity in the structural phase diagram
Publication: Research - peer-review › Journal article – Annual report year: 2003

Synchrotron X-ray analysis of highly strained aluminium during in-situ annealing
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

The three-dimensional X-ray diffraction microscope: 3D maps of grains and grain dynamics in polycrystalline materials
Publication: Research - peer-review › Journal article – Annual report year: 2003

3D røntgen mikroskopet
Publication: Research › Article in proceedings – Annual report year: 2002

3DXRD - a novel tool for materials science
Publication: Research › Conference abstract in proceedings – Annual report year: 2002

3DXRD microscopy - a comparison with neutron diffraction
Publication: Research - peer-review › Journal article – Annual report year: 2003

A computer simulating tool for 3DXRD microscope
Publication: Research › Conference abstract in proceedings – Annual report year: 2002

From 2D to 3D microtexture investigations
Publication: Research - peer-review › Conference article – Annual report year: 2002

Grain dynamics in Bi-2223 tapes measured by the 3DXRD microscope
Publication: Research - peer-review › Journal article – Annual report year: 2002

Grain maps by 3DXRD microscopy
Publication: Research › Conference abstract in proceedings – Annual report year: 2002
Grain nucleation and growth during phase transformations
Publication: Research - peer-review › Journal article – Annual report year: 2002

In-situ characterization of thermomechanical processes
Publication: Research › Conference abstract for conference – Annual report year: 2002

In situ observations on the austenite stability in TRIP-steel during tensile testing
Publication: Research - peer-review › Journal article – Annual report year: 2002

Lattice rotations of individual bulk grains during deformation
Publication: Research - peer-review › Conference article – Annual report year: 2002

Local strain measurements by using marker particles and synchrotron X-ray absorption tomography
Publication: Research › Conference abstract in proceedings – Annual report year: 2002

Local strain measurements by using marker particles and synchrotron X-ray absorption tomography
Publication: Research › Conference abstract in proceedings – Annual report year: 2002

Local strain measurements by using marker particles and synchrotron X-ray absorption tomography
Publication: Research › Conference abstract in proceedings – Annual report year: 2002

Microstructural dynamics of Bi-2223/Ag tapes annealed in 8% O₂
Publication: Research - peer-review › Journal article – Annual report year: 2002

Observation of high-resolution diffraction profiles from single grains within polycrystalline metals
Publication: Research › Conference abstract for conference – Annual report year: 2002

Recrystallization studies using the 3DXRD microscope
Publication: Research › Conference abstract in proceedings – Annual report year: 2002

Strain tensor development in a single grain in the bulk of a polycrystal under loading
Publication: Research - peer-review › Journal article – Annual report year: 2002

Structural refinement of the individual grains in a polycrystal
Publication: Research › Conference abstract in proceedings – Annual report year: 2002

A three-dimensional X-ray diffraction microscope for deformation studies of polycrystals
Publication: Research - peer-review › Conference article – Annual report year: 2002

3d X-ray diffraction microscopy of materials (invited talk)
Publication: Research › Conference abstract for conference – Annual report year: 2001

3DXRD: A new tool for bridging the length scales in materials science
Publication: Research › Conference abstract in proceedings – Annual report year: 2001

Direct observation of grain boundary wetting by synchrotron radiation imaging techniques
Publication: Research - peer-review › Conference article – Annual report year: 2001

Growth kinetics of individual cube grains as studied by the 3D X-ray diffraction microscope
Publication: Research - peer-review › Article in proceedings – Annual report year: 2001
High spatial resolution strain measurements within bulk materials by slit-imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2001

In situ measurement of grain rotation during deformation of polycrystals
Publication: Research - peer-review › Journal article – Annual report year: 2001

Mapping of grain boundaries in 3D
Publication: Research › Conference abstract in proceedings – Annual report year: 2001

Mesoscale structural characterization within bulk materials by high-energy X-ray microdiffraction
Publication: Research - peer-review › Journal article – Annual report year: 2001

Microstructural dynamics in Bi-2223/AG tapes
Publication: Research - peer-review › Book chapter – Annual report year: 2001

Microstructural evolution at the initial stages of annealing in a Bi-2223 multifilament tape
Publication: Research - peer-review › Journal article – Annual report year: 2001

Optimization of BSCCO/Ag tapes with the help of TEM
Publication: Research › Conference abstract for conference – Annual report year: 2001

Plastic deformation and recrystallization studied by the 3D X-ray microscope
Publication: Research - peer-review › Article in proceedings – Annual report year: 2001

Quantification of minor texture components by hard X-rays
Publication: Research - peer-review › Journal article – Annual report year: 2001

Relation between texture and critical current density of textured YBa$_2$Cu$_3$O$_x$ plates
Publication: Research - peer-review › Journal article – Annual report year: 2001

Source size conserving broad band monochromators of fixed exit geometry for high energy synchrotron radiation
Publication: Research - peer-review › Journal article – Annual report year: 2001

Surface science with SR
Publication: Research › Conference abstract for conference – Annual report year: 2001

Three-dimensional maps of grain boundaries and the stress state of individual grains in polycrystals and powders
Publication: Research - peer-review › Journal article – Annual report year: 2001

Three dimensional strain measurements in bulk materials with high spatial resolution
Publication: Research - peer-review › Article in proceedings – Annual report year: 2001

Tracking: A method for structural characterization of grains in powders or polycrystals
Publication: Research - peer-review › Journal article – Annual report year: 2001

Transmission electron microscopy investigation of Bi-2223/Ag tapes
Publication: Research - peer-review › Journal article – Annual report year: 2001

X-ray microscopy, Imaging
Publication: Research › Conference abstract for conference – Annual report year: 2001
3D characterization of grains in powders or polycrystals
Publication: Communication › Journal article – Annual report year: 2001

A conical slit for three-dimensional XRD mapping
Publication: Research - peer-review › Journal article – Annual report year: 2000

A high energy microscope for local strain measurements within bulk materials
Publication: Research - peer-review › Article in proceedings – Annual report year: 2001

Anisotropic dynamical scaling in a weakly 3D system: The case of oxygen ordering in YBa$_2$Cu$_3$O$_{6.5}$
Publication: Research - peer-review › Journal article – Annual report year: 2000

Application of high-energy synchrotron radiation for texture studies
Publication: Research - peer-review › Journal article – Annual report year: 2000

A three-dimensional X-ray diffraction microscope for deformation studies of polycrystals
Publication: Research › Conference abstract in proceedings – Annual report year: 2000

Characterization of deformation structure and recrystallization in a tensile deformed [110] aluminum single crystal
Publication: Research › Article in proceedings – Annual report year: 2000

Kinetics of individual grains during recrystallization
Publication: Research - peer-review › Journal article – Annual report year: 2000

Recrystallization in 3D
Publication: Research › Article in proceedings – Annual report year: 2000

Three dimensional mapping of grain boundaries
Publication: Research › Article in proceedings – Annual report year: 2000

Three dimensional maps of polycrystalline materials
Publication: Research › Conference abstract in proceedings – Annual report year: 2000

A focusing multilayer analyser for local diffraction studies
Publication: Research - peer-review › Journal article – Annual report year: 1999

A high energy X-ray microscope for the local structural characterization of bulk materials
Publication: Research › Article in proceedings – Annual report year: 1999

An in situ study of the annealing behaviour of BiSCCO Ag tapes
Publication: Research › Journal article – Annual report year: 1999

Comparison of experimental techniques for characterization of through-thickness texture variations
Publication: Research - peer-review › Article in proceedings – Annual report year: 1999

Cooling behavior of BSCCO/Ag tapes
Publication: Research - peer-review › Journal article – Annual report year: 1999

Cooling studies of BSCCO/Ag tapes in 8% oxygen
Publication: Research › Conference abstract in proceedings – Annual report year: 1999
High energy synchrotron strain scanning on highly plastically deformed torsion samples
Publication: Research › Article in proceedings – Annual report year: 1999

In situ study of equilibrium phenomena and kinetics in a BiSCCO Ag tape
Publication: Research › Journal article – Annual report year: 1999

Local strain measurement techniques in bulk materials
Publication: Research › Conference abstract in proceedings – Annual report year: 1999

Materials science applications of high energy synchrotron radiation
Publication: Research › Conference abstract in proceedings – Annual report year: 1999

Microstructure, texture and critical current of Ag-sheathed 2223 multifilament tapes
Publication: Research › Journal article – Annual report year: 1999

Plastic deformation, recrystallization and internal stresses studied by a new 3D X-ray microscope
Publication: Research › Conference abstract in proceedings – Annual report year: 1999

Superstructure formation and the structural phase diagram of YBa$_2$Cu$_3$O$_{6+x}$
Publication: Research › Journal article – Annual report year: 1999

Synkrotronstudier af BiSCCO/Ag bånd
Publication: Research › Journal article – Annual report year: 1999

An in situ diffraction study of a solid oxide fuel cell system
Publication: Research - peer-review › Article in proceedings – Annual report year: 1998

A novel DC Magnetron sputtering facility for space research and synchrotron radiation optics
Publication: Research - peer-review › Conference article – Annual report year: 1998

A triple-crystal diffractometer for high-energy synchrotron radiation at the HASYLAB high-field wiggler beamline BW5
Publication: Research - peer-review › Journal article – Annual report year: 1998

Focusing Optics for High-Energy X-ray Diffraction
Publication: Research - peer-review › Conference article – Annual report year: 1998

Future trends: Texture analysis for structure-sensitive properties
Publication: Research - peer-review › Journal article – Annual report year: 1998

In-situ synchrotron studies of the annealing behaviour of high Tc BSCCO/Ag-tapes
Publication: Research › Conference abstract in proceedings – Annual report year: 1998

Investigations on the formation mechanism of the Bi(2223) phase in bulk samples and Ag-sheathed tapes
Publication: Research › Article in proceedings – Annual report year: 1998

Materials science applications of high energy synchrotron radiation
Publication: Research › Conference abstract in proceedings – Annual report year: 1998

Microstructure analysis with hard synchrotron radiation
Publication: Research › Conference abstract in proceedings – Annual report year: 1998
Structural phase diagram of oxygen ordering in the high-$T_c$ superconductor $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$
Publication: Research › Conference abstract in proceedings – Annual report year: 1998

Structural studies of BSCCO/Ag-tapes by high-energy synchrotron X-ray diffraction
Publication: Research › Journal article – Annual report year: 1998

Superstructure formation and structural phase diagram of $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$
Publication: Research › Conference abstract for conference – Annual report year: 1998

Three dimensional X-ray diffraction using high energy synchrotron radiation
Publication: Research › Conference abstract in proceedings – Annual report year: 1998

Through-thickness texture variations determined non-destructively by high energy synchrotron radiation
Publication: Research - peer-review › Journal article – Annual report year: 1998

Use of image-processing tools for texture analysis of high-energy X-ray synchrotron data
Publication: Research - peer-review › Journal article – Annual report year: 1998

Dynamics of oxygen ordering in $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ studied by neutron and high-energy synchrotron x-ray diffraction
Publication: Research - peer-review › Conference article – Annual report year: 1997

An in-situ diffraction study of a solid oxide fuel cell system
Publication: Research › Conference abstract for conference – Annual report year: 1997

Annealing of Ag-clad BiSCCO tapes studied in-situ by high-energy synchrotron x-ray
Publication: Research › Article in proceedings – Annual report year: 1997

Applications of high-energy synchrotron radiation for structural studies of polycrystalline materials
Publication: Research - peer-review › Journal article – Annual report year: 1997

Applications of high-energy synchrotron radiation within materials science
Publication: Research › Conference abstract for conference – Annual report year: 1997

A synchrotron x-ray diffraction study of the local residual strains around a single inclusion in an Al/W metal-matrix composite
Publication: Research - peer-review › Journal article – Annual report year: 1997

Bi-2223 tapes for power applications
Publication: Research › Conference abstract for conference – Annual report year: 1997

Draft of instrument
Publication: Research › Conference abstract in proceedings – Annual report year: 1997

Dynamics of oxygen ordering in $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ studied by neutron and high-energy synchrotron x-ray diffraction
Publication: Research › Conference abstract for conference – Annual report year: 1997

Focusing optics for high energy x-ray diffraction
Publication: Research › Conference abstract for conference – Annual report year: 1997
High energy x-ray scattering for materials science
Publication: Research › Conference abstract for conference – Annual report year: 1997

In-situ studies of air electrodes in solid oxide fuel cells at 850 deg.C using synchrotron diffraction
Publication: Research › Article in proceedings – Annual report year: 1997

Local strain contours around inclusions in wire-drawn Cu/W composites
Publication: Research - peer-review › Journal article – Annual report year: 1997

Strain profiling in thin films by synchrotron radiation - a novel technique
Publication: Research › Conference abstract for conference – Annual report year: 1997

The prospect of a 3D high energy probe for materials science
Publication: Research › Conference abstract in proceedings – Annual report year: 1997

Three dimensional mapping of materials science properties using high energy synchrotron radiation
Publication: Research › Conference abstract in proceedings – Annual report year: 1997

Alignment of high-Tc superconducting crystallites in silver cladding studied by high-energy synchrotron x-ray diffraction
Publication: Research › Conference abstract for conference – Annual report year: 1996

Anvendelse af høj energi synkrotronstråling i materialeforskningen
Publication: Research › Conference abstract for conference – Annual report year: 1996

Anvendelser af synkrotronforskning indenfor materialeforskningen ved AFM
Publication: Research › Journal article – Annual report year: 1996

Dynamics of oxygen ordering in YBa2Cu3O6+x studied by neutron and high-energy synchrotron x-ray diffraction
Publication: Research › Conference abstract for conference – Annual report year: 1996

High energy synchrotron radiation: a new tool for texture and strain determinations
Publication: Research › Conference abstract in proceedings – Annual report year: 1996

High energy synchrotron radiation: A new tool for texture and strain determinations
Publication: Research › Conference abstract in proceedings – Annual report year: 1996

Højenergi røntgenstråling, et vigtigt værktøj i materialeforskningen
Publication: Communication › Journal article – Annual report year: 1996

In-situ synchrotron x-ray diffraction on BiSCCO-tapes during annealing
Publication: Research › Conference abstract for conference – Annual report year: 1996

Investigation of local texture by high energy synchrotron radiation
Publication: Research › Conference abstract for conference – Annual report year: 1996

Local structure determination in polycrystalline materials using high energy synchrotron radiation
Publication: Research › Conference abstract in proceedings – Annual report year: 1996

Local texture analysis using high energy synchrotron radiation
Publication: Research › Article in proceedings – Annual report year: 1996
Powder diffraction at high energies
Publication: Research › Conference abstract for conference – Annual report year: 1996

Structural phase transitions in bulk $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$ with $x=0.35$ and $x=0.36$
Publication: Research › Journal article – Annual report year: 1996

Amorphous silica studied by high energy x-ray diffraction
Publication: Research › Journal article – Annual report year: 1995

Amorphous silica studied by high energy x-ray diffraction
Publication: Research - peer-review › Journal article – Annual report year: 1995

Applications of high energy synchrotron radiation within metallurgy
Publication: Research › Conference abstract for conference – Annual report year: 1995

Current induced phase change in strontium doped lanthanum manganite: A synchrotron study of a perovskite solid oxide fuel cell electrode at 1000 deg. C
Publication: Research › Conference abstract for conference – Annual report year: 1995

Diffraction on disordered materials using 'neutron-like' photons
Publication: Research › Journal article – Annual report year: 1995

Investigation of structural phase transitions in perovskites using high energy synchrotron radiation
Publication: Research › Journal article – Annual report year: 1995

Multiple scattering in synchrotron studies of disorder materials
Publication: Research - peer-review › Journal article – Annual report year: 1995

Observation of Ortho-III correlations by neutron and hard x-ray scattering in an untwinned $\text{YBa}_2\text{Cu}_3\text{O}_{6.77}$ single crystal
Publication: Research › Journal article – Annual report year: 1995

Random-field structural transition in $\text{YBa}_2\text{Cu}_3\text{O}_{6.5}$
Publication: Research › Journal article – Annual report year: 1995

Structural phase diagram of $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$
Publication: Research › Conference abstract for conference – Annual report year: 1995

Synchrotron radiation diffraction: A novel tool for recrystallization studies in bulk $\mu\text{m}^3$ sized local areas
Publication: Research › Article in proceedings – Annual report year: 1995

The local perfection of massive gradient crystals studied by high-energy x-ray diffraction
Publication: Research - peer-review › Journal article – Annual report year: 1995

The resolution function of a triple-crystal diffractometer for high-energy synchrotron radiation. II. Dispersive Laue geometry
Publication: Research - peer-review › Journal article – Annual report year: 1996

Experimental investigations of oxygen ordering and atomic displacements in the Ortho-II phase of $\text{YBa}_2\text{Cu}_3\text{O}_{6.5}$ by neutron and synchrotron x-ray diffraction
Publication: Research › Conference abstract in proceedings – Annual report year: 1994

High energy synchrotron radiation. A new probe for condensed matter research
Publication: Research - peer-review › Journal article – Annual report year: 1995
Simultaneous neutron and x-ray refinement of Ortho-II superstructure in \( \text{YBa}_2\text{Cu}_3\text{O}_{6.5} \)
Publication: Research › Conference article – Annual report year: 1994

Studies of oxygen ordering in oxygen deficient and metal ion doped \( \text{YBa}_2\text{Cu}_3\text{yM}_y\text{O}_{6+x} \) (\( M = \text{Al, Fe, Co} \)) high \( T_c \) superconductors
Publication: Research - peer-review › Book chapter – Annual report year: 1994

The line shape of the Ortho-II superstructure reflection in \( \text{YBa}_2\text{Cu}_3\text{O}_{6.5} \)
Publication: Research › Conference article – Annual report year: 1994

Effects of \( \text{Co, Fe, and Al} \) doping on the oxygen disordering and superconducting transition temperature of \( \text{YBa}_2\text{Cu}_3\text{O}_{6+x} \)
Publication: Research › Journal article – Annual report year: 1993

Oxygen-ordering phenomena in \( \text{YBa}_2\text{Cu}_3\text{O}_{6+x} \) studied by Monte Carlo simulation: PHASE-DIAGRAM, STRUCTURE FACTOR AND OXYGEN EQUILIBRIUM PRESSURE
Publication: Research › Journal article – Annual report year: 1993

Structure and superconductivity in Co doped \( \text{YBa}_2\text{Cu}_3\text{O}_{6+x} \)
Publication: Research - peer-review › Journal article – Annual report year: 1993

Oxygen order and superconductivity in pure and doped \( \text{YBa}_2\text{Cu}_3\text{O}_{6+x} \)
Publication: Research › Conference abstract in proceedings – Annual report year: 1992

Solving the 3-D ASYNNNI model on the connection machine
Publication: Research › Conference abstract in proceedings – Annual report year: 1992

Structure and superconductivity in Co, Fe, and Al doped \( \text{YBa}_2\text{Cu}_3\text{O}_{6+x} \)
Publication: Research › Conference abstract for conference – Annual report year: 1992

The role of disorder and defect structures in high temperature superconductivity
Publication: Research › Conference abstract for conference – Annual report year: 1992

Ageing and structural stability of oxygen in the \( \text{YBaCuO} \) superconductor via a diffusion model
Publication: Research - peer-review › Journal article – Annual report year: 1991

Antiferromagnetism and metallic conductivity in \( \text{Nb}_{12}\text{O}_{29} \)
Publication: Research - peer-review › Journal article – Annual report year: 1991

Computer simulation of phase separation and ordering processes in low-dimensional systems
Publication: Research › Journal article – Annual report year: 1991

Dynamical scaling of oxygen ordering in \( \text{YBa2Cu3O7-δ} \)
Publication: Research - peer-review › Journal article – Annual report year: 1991

Electrical and magnetic properties of \( \text{Nb}_{2}\text{O}_{5-γ} \) crystallographic shear structures
Publication: Research › Journal article – Annual report year: 1991

International interesse for superleder-teori
Publication: Communication › Journal article – Annual report year: 1991
Lattice gas simulation of oxygen ordering in YBa$_2$Cu$_3$O$_{6+x}$ showing dynamical scaling
Publication: Research › Journal article – Annual report year: 1991

Modelling the relationships between oxygen ordering and superconductivity transition temperature in YBa$_2$Cu$_3$O$_x$
Publication: Research - peer-review › Journal article – Annual report year: 1991

Oxygen Ordering and Superconductivity in the High T$_c$ Superconductor YBa$_2$Cu$_3$O$_{6+x}$
Publication: Research › Ph.D. thesis – Annual report year: 1991

Relation between superconducting transition temperature and oxygen ordering in YBa$_2$Cu$_3$O$_{6+x}$
Publication: Research - peer-review › Journal article – Annual report year: 1991

Study of the structural phase diagram, oxygen bulk in-diffusion, and equilibrium partial pressure of YBa$_2$Cu$_3$O$_{6+x}$
Publication: Research › Article in proceedings – Annual report year: 1991

Temporal variation of superconductivity transition temperature and dynamical scaling of oxygen ordering in YBa$_2$Cu$_3$O$_x$
Publication: Research - peer-review › Journal article – Annual report year: 1991

Twin-domain size and bulk oxygen in-diffusion kinetics of YBa$_2$Cu$_3$O$_{6+x}$ studied by neutron powder diffraction and gas volumetry
Publication: Research › Journal article – Annual report year: 1991

Structural phase diagram and equilibrium oxygen partial pressure of YBa$_2$Cu$_3$O$_{6+x}$
Publication: Research › Article in proceedings – Annual report year: 1990

Structural phase diagram and equilibrium oxygen partial pressure of YBa$_2$Cu$_3$O$_{6+x}$
Publication: Research › Article in proceedings – Annual report year: 1990

Structural phase diagram and equilibrium oxygen partial pressure of YBa$_2$Cu$_3$O$_{6+x}$ (PS-08.05.21)
Publication: Research - peer-review › Journal article – Annual report year: 1990

The structural phase diagram and oxygen equilibrium partial pressure of YBa$_2$Cu$_3$O$_{6+x}$ studied by neutron powder diffraction and gas volumetry
Publication: Research › Journal article – Annual report year: 1989

Oxidation Kinetics in Oxygen Deficient YBa$_2$Cu$_3$O$_{7-x}$ Studied by Neutron Powder Diffraction
Publication: Research - peer-review › Journal article – Annual report year: 1989

Projects:

High Resolution X-ray Diffraction Contrast Tomography
Project: PhD

Multiscale coarsening studied by Dark Fields X-ray Microscopy
Project: PhD

Multi-Scale 3D Imaging of Heterogeneous Nucleation in Ferroelectrics
Project: PhD

3D Imaging center
Project
Dark Field X-ray Microscopy of energy materials  
Project: PhD

Structural reorganization during cyclic deformation  
Project: PhD

Computer Simulation of the 3D structure of Materials  
Project: PhD

Coarsening of polycrystalline structures  
Project: PhD

Alliance for Imaging and Modelling of Energy Applications  
Project

Multi-scale mapping of strain mechanisms in lead-free piezoceramics  
Project: PhD

3D Neutron Diffraction (3DND) methodology  
Project: PhD

Nanofabrication of Next-Generation X-Ray Optical Components  
Project: PhD

Methods to determine fast-ion distribution functions from multidiagnostic measurements  
Project: PhD

Miljøvenlige, organiske solceller med kontrolleret nanostruktur, baseret på partikler i vandig dispersion  
Project: PhD

3D Studies of Coarsening Kinetics of Individual Grains  
Project: PhD

Synchrotron studies and modelling of the dynamics of dislocation structures  
Project: PhD

Strukturelle egenskaber af superledende BSCCO/Ag bånd under afkøling  
Project: PhD

Activities:

X-ray imaging methods for mapping orientations and strains in grains  
Activity: Talks and presentations › Conference presentations

3DXRD - potential applications at PETRA  
Activity: Talks and presentations › Conference presentations

3DXRD studies of nano-metals  
Activity: Talks and presentations › Conference presentations