Dorte Juul Jensen - DTU Orbit (24/12/2017)

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Department of Mechanical Engineering - Professor
Department of Wind Energy - Professor
Manufacturing Engineering
Materials science and characterization

Publications:

4D Study of Grain Growth in Armco Iron Using Laboratory X-ray Diffraction Contrast Tomography: Paper
Publication: Research - peer-review › Conference article – Annual report year: 2017

A method to characterize the roughness of 2-D line features: recrystallization boundaries
Publication: Research - peer-review › Journal article – Annual report year: 2016

Analysis of bearing steel exposed to rolling contact fatigue
Publication: Research - peer-review › Journal article – Annual report year: 2017

Boundary migration in a 3D deformed microstructure inside an opaque sample
Publication: Research - peer-review › Journal article – Annual report year: 2017

Direct observation of nucleation in the bulk of an opaque sample
Publication: Research - peer-review › Journal article – Annual report year: 2017

Fabricating interstitial-free steel with simultaneous high strength and good ductility with homogeneous layer and lamella structure
Publication: Research - peer-review › Journal article – Annual report year: 2017

Publication: Research - peer-review › Book – Annual report year: 2017

Quantification of deformation microstructure at ultra-low tensile strain in pure Al prepared by spark plasma sintering
Publication: Research - peer-review › Conference article – Annual report year: 2017

Roughness of grain boundaries in partly recrystallized aluminium
Characterization of boundary roughness of two cube grains in partly recrystallized copper
Publication: Research - peer-review › Conference article – Annual report year: 2015

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

Effects of structural heterogeneity of nanostructured copper on the evolution of the sizes of recrystallized grains during annealing
Publication: Research - peer-review › Conference article – Annual report year: 2015

Evolution of microstructure and texture during recovery and recrystallization in heavily rolled aluminum
Publication: Research - peer-review › Conference article – Annual report year: 2015

In-situ observations of nucleation in Al-0.1Mg
Publication: Research - peer-review › Conference article – Annual report year: 2015

Kinetics of individual grains during recrystallization of cold-rolled copper
Publication: Research - peer-review › Conference article – Annual report year: 2015

Local strain distributions in partially recrystallized copper determined by in situ tensile investigation
Publication: Research - peer-review › Conference article – Annual report year: 2015

Nucleation at hardness indentations in cold rolled Al
Publication: Research - peer-review › Conference article – Annual report year: 2015

Orientations of recrystallization nuclei developed in columnar-grained Ni at triple junctions
Publication: Research - peer-review › Conference article – Annual report year: 2015

Supercube grains leading to a strong cube texture and a broad grain size distribution after recrystallization
Publication: Research - peer-review › Journal article – Annual report year: 2015

Thermal stability of a highly-deformed warm-rolled tungsten plate in the temperature range 1100 °C to 1250 °C
Publication: Research - peer-review › Journal article – Annual report year: 2015
Thermal stability of warm-rolled tungsten
Publication: Research › Ph.D. thesis – Annual report year: 2015

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

Comparative characterization of Cu–Ni substrates for coated conductors
Publication: Research - peer-review › Journal article – Annual report year: 2014

Direct observation of grain boundary migration during recrystallization within the bulk of a moderately deformed aluminium single crystal
Publication: Research - peer-review › Journal article – Annual report year: 2014

Effects of heterogeneity on recrystallization kinetics of nanocrystalline copper prepared by dynamic plastic deformation
Publication: Research - peer-review › Journal article – Annual report year: 2014

Fatigue damage of steel components
Publication: Communication › Report chapter – Annual report year: 2014

In-Situ Investigation of Local Boundary Migration During Recrystallization
Publication: Research - peer-review › Journal article – Annual report year: 2014

Microstructural investigation of the recrystallization of warm-rolled tungsten
Publication: Research - peer-review › Conference article – Annual report year: 2014

New Frontiers of Nanomaterials. Proceedings of the 35th Risø International Symposium on Materials Science
Publication: Research - peer-review › Book – Annual report year: 2014

Oriented growth during recrystallization revisited in three dimensions
Publication: Research - peer-review › Journal article – Annual report year: 2014

Partially recrystallized microstructures of cold-rolled copper and mechanical properties
Publication: Research - peer-review › Conference article – Annual report year: 2014
Boundary migration during recrystallization of heavily deformed pure nickel
Publication: Research - peer-review › Conference article – Annual report year: 2012

Characterization of nanometals
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2013

Danish Chinese Center for Nanometals - Annual report 2011
Publication: Communication › Report – Annual report year: 2012

Effects of Initial Parameters on the Development of Cube Texture during Recrystallization of Copper
Publication: Research - peer-review › Conference article – Annual report year: 2011

In-situ measurement of annealing kinetics of individual bulk grains in nanostructured aluminium
Publication: Research - peer-review › Journal article – Annual report year: 2012

Nanometals - Status and Perspective: Proceedings of the 33rd Risø International Symposium on Materials Science
Publication: Research - peer-review › Book – Annual report year: 2012

New 3DXRD results on recrystallization and grain growth
Publication: Research - peer-review › Conference article – Annual report year: 2012

Orientation changes during annealing of nanostructured aluminium
Publication: Research - peer-review › Conference article – Annual report year: 2012

Recrystallization kinetics of nanostructured copper processed by dynamic plastic deformation
Publication: Research - peer-review › Conference article – Annual report year: 2012

The influence of strain on annealing behaviour of heavily rolled aluminium AA1050
Publication: Research - peer-review › Conference article – Annual report year: 2012

The three dimensional X-ray diffraction technique
Publication: Research - peer-review › Journal article – Annual report year: 2012

Three-dimensional investigation of recrystallization nucleation in a particle-containing Al alloy
Publication: Research - peer-review › Journal article – Annual report year: 2012

Analysis of Orientation Relations Between Deformed Grains and Recrystallization Nuclei

Deformed metals - structure, recrystallisation and strength
Hansen, N. & Juul Jensen, D. 2011 In : Materials Science and Technology. 27, 8, p. 1229-1240

Evolution of orientations and deformation structures within individual grains in cold rolled columnar grained nickel

In situ measurements of growth rates and grain-averaged activation energies of individual grains during recrystallization of 50% cold-rolled aluminium

In situ observation of boundary migration during recrystallization of pure aluminum cold-rolled to high strain
Zhang, Y. & Juul Jensen, D. 2011

Local boundary migration during recrystallization in pure aluminium

Recrystallization kinetics
Juul Jensen, D. 2011

Recrystallization kinetics of 90% cold rolled copper with different initial grain sizes

The influence of strain on annealing behaviour of heavily rolled aluminium AA1050
Mishin, O., Juul Jensen, D. & Hansen, N. 2011

Towards an integrated materials characterization toolbox

3D EBSD characterization of deformation structures in commercial purity aluminum
Fengxiang, L., Godfrey, A., Juul Jensen, D. & Winther, G. 2010 In : Materials Characterization. 61, 11, p. 1203-1210
Direct non-destructive observation of bulk nucleation in 30% deformed aluminum
Publication: Research - peer-review › Journal article – Annual report year: 2009

DXRD and Its Applications Leading to New Modelling
Publication: Research - peer-review › Article in proceedings – Annual report year: 2010

Effects of clustered nucleation on recrystallization
Publication: Research - peer-review › Journal article – Annual report year: 2009

Effects of strain on recrystallization of nickel metals and nanometals produced by heavy cold rolling
Publication: Research - peer-review › Conference article – Annual report year: 2009

Measurements of the Curvature of Protrusions/Retrausions on Migrating Recrystallization Boundaries
Publication: Research - peer-review › Journal article – Annual report year: 2009

Microstructural path model and strain dependence of recrystallisation in commercial aluminium
Publication: Research - peer-review › Journal article – Annual report year: 2009

Nanostructured metals: Fundamentals to applications: Proceedings of the 30th Risø International Symposium on Materials Science
Publication: Research - peer-review › Book – Annual report year: 2009

Time Evolution in 3D Metal Microstructures-Recrystallization
Publication: Research - peer-review › Journal article – Annual report year: 2009

3DXRD characterization and modeling of solid-state transformation processes
Publication: Research - peer-review › Journal article – Annual report year: 2008

Automatic determination of recrystallization parameters based on EBSD mapping
Publication: Research - peer-review › Journal article – Annual report year: 2008

Cube texture in heavily cold rolled pure nickel
Publication: Research - peer-review › Article in proceedings – 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

Publication: Research - peer-review › Book – Annual report year: 2008

Experimental quantification of nucleation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

Molecular dynamics simulations of grain boundary migration during recrystallization employing tilt and twist dislocation boundaries to provide the driving pressure
Publication: Research - peer-review › Journal article – Annual report year: 2008

Neutron and synchrotron X-ray studies of recrystallization kinetics
Publication: Research - peer-review › Conference article – Annual report year: 2008

Structural parameters and annealing behaviour of heavily rolled aluminium
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

Three-dimensional geometric simulations of random anisotropic growth during transformation phenomena
Publication: Research - peer-review › Journal article – Annual report year: 2007

3D spatial distribution of nuclei in 90 % cold rolled aluminium
Publication: Research - peer-review › Conference article – Annual report year: 2007

Atomistisk simulering af rekrystallisation
Publication: Research › Article in proceedings – Annual report year: 2007

Development of the cube texture at low annealing temperatures in highly rolled pure nickel
Publication: Research - peer-review › Journal article – Annual report year: 2007

Effect of annealing temperature on recrystallisation in Al (AA1200) cold rolled to a true strain of 4
Publication: Research - peer-review › Conference article – Annual report year: 2007
X-ray microscopy in four dimensions
In : Materials Today. 9, p. 18-25
Publication: Research - peer-review › Journal article – Annual report year: 2006

Center for Fundamental Research. Metal Structures in Four Dimensions. Annual report 2003
Publication: Research › Report – Annual report year: 2005

Deformation strain inhomogeneity in columnar grain nickel
Publication: Research - peer-review › Journal article – Annual report year: 2005

Local orientation measurements in 3D
Publication: Research - peer-review › Conference article – Annual report year: 2005

Metal structures in four dimensions
Publication: Research - peer-review › Journal article – Annual report year: 2005

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

Orientation correlations in metal structures from the micrometer to nanometer range
Publication: Research - peer-review › Conference article – Annual report year: 2004

Orientation of recrystallization nuclei studied by 3DXRD
Publication: Research - peer-review › Conference article – Annual report year: 2005

Recrystallisation kinetics: From statics to dynamics and from 2D to 3D
Juul Jensen, D. 2005 In : Materials Science and Technology. 21, p. 1365-1373
Publication: Research - peer-review › Journal article – Annual report year: 2005

Recrystallisation kinetics of aluminium AA1200 cold rolled to true strain of 2
Wu, G. & Juul Jensen, D. 2005 In : Materials Science and Technology. 21, p. 1407-1411
Publication: Research - peer-review › Journal article – Annual report year: 2005

The orientations of nuclei at triple junctions in deformed columnar grain Ni
Publication: Research - peer-review › Conference article – Annual report year: 2005

Towards atomic level simulations of recrystallisation - setting up suitable geometry
Publication: Research - peer-review › Journal article – Annual report year: 2005

A method for in-situ measurements of the growth in the bulk of deformed single crystals at the 3DXRD microscope
Effects on nuclei clustering on recrystallization kinetics
Publication: Research - peer-review » Conference article – Annual report year: 2004

Evolution of deformation microstructures in 3D. Proceedings
Publication: Research - peer-review » Book chapter – Annual report year: 2004

Evolution of Mechanical and Microstructural Properties of ECAP Deformed Copper
Publication: Research - peer-review » Book chapter – Annual report year: 2004

Growth aspects of recrystallization
Publication: Research - peer-review » Conference article – Annual report year: 2004

Growth rate distributions during recrystallization of copper
Publication: Research - peer-review » Conference article – 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 measurements of growth of nuclei within the bulk of deformed aluminum single crystals
Publication: Research - peer-review » Conference article – Annual report year: 2004

Local measurements of stored energy: Microstructural and stereological considerations
Publication: Research » Article in proceedings – Annual report year: 2004

Microstructural parameters and flow stress in Al-0.13% Mg deformed by ECAE processing
Publication: Research - peer-review » Conference article – Annual report year: 2004

Non-destructive characterisation of grain boundaries in 3D
Publication: Research - peer-review » Conference article – Annual report year: 2004

Recrystallization kinetics in the bulk and at the surface
Publication: Research - peer-review » Conference article – Annual report year: 2004

Statistical TEM analysis of boundary misorientations in aluminium deformed to large and extra large strains by ECAE
Publication: Research - peer-review » Conference article – Annual report year: 2004
The effect of roll gap geometry on microstructure in cold-rolled aluminum

Three-dimensional X-ray diffraction microscopy using high-energy X-rays

Watching the growth of bulk grains during recrystallization of deformed metals

3DXRD microscopy (invited talk)

Automatic determination of recrystallization parameters in metals by electron backscatter pattern line scans

Center for Fundamental Research. Metal Structures in Four Dimensions. Annual report 2002

In situ characterisation of thermomechanical processes

Microstructural parameters and flow stress in Al-0.13%Mg deformed by ECAE

Microstructures and boundary populations in materials produced by equal channel angular extrusion

Non-destructive mapping of grains in three dimensions
Orientation correlations in metal substructures from the micrometre to nanometre range
Publication: Research › Conference abstract in proceedings – Annual report year: 2003

Orientation inhomogeneities resolved by 3D X-ray diffraction and EBSD
Publication: Research › Article in proceedings – Annual report year: 2003

Orientation relationships between recrystallization nuclei at triple junctions and deformed structures
Publication: Research - peer-review › Journal article – Annual report year: 2003

Recrystallisation growth rates in hot deformed aluminium
Publication: Research - peer-review › Article in proceedings – Annual report year: 2003

Recrystallization at the 3DXRD microscope
Publication: Research › Article in proceedings – Annual report year: 2003

Recrystallization in hot vs cold deformed commercial aluminum: A microstructure path comparison
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

Reply to comment on "Microstructural path and temperature dependence of recrystallization in commercial aluminum"
Publication: Research - peer-review › Journal article – 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

Annealing textures
Publication: Research - peer-review › Book chapter – Annual report year: 2002
Assessment of microstructural characterisation of heavily deformed materials by electron microscopy
Publication: Research - peer-review › Article in proceedings – Annual report year: 2001

EBSD contra TEM characterization of a deformed aluminum single crystal
Publication: Research - peer-review › Book chapter – Annual report year: 2001

Effect of grain orientation on microstructures during hot deformation of AA 3104 aluminium alloy by plane strain compression
Publication: Research - peer-review › Journal article – Annual report year: 2001

Experimental measurements of nucleation and growth rates
Publication: Research - peer-review › Article in proceedings – 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

Growth rates for different texture components during recrystallization of if steel
Publication: Research - peer-review › Journal article – Annual report year: 2001

Investigation of relationships between matrix orientations and nuclei at triple junctions
Publication: Research - peer-review › Article in proceedings – Annual report year: 2001

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

Measurement of orientation dependent stored energy of deformation on a local scale
Publication: Research - peer-review › Article in proceedings – Annual report year: 2001

Microstructural path and temperature dependence of recrystallization in commercial aluminum
Publication: Research - peer-review › Journal article – Annual report year: 2001

Nanostructured metals - processing, microstructure and properties
Hansen, N. & Juul Jensen, D. 2001 In : Inzynieria Materialowa. 5, p. 1006-1011
Publication: Research - peer-review › Journal article – Annual report year: 2001

Plastic deformation and recrystallization studied by the 3D X-ray microscope
Growth during recrystallization

Investigation of a cold-rolled microstructure by orientation imaging microscopy

Kinetics of individual grains during recrystallization

Measurements of crystallographic orientations in 1D, 2D and 3D (invited lecture)

Nucleation at triple junctions in pure aluminium

Recrystallization in 3D

Three dimensional mapping of grain boundaries

Three dimensional maps of polycrystalline materials

Through-thickness texture gradients in cold-rolled aluminum
Automatic recognition of recrystallized grains in partly recrystallized samples from crystal orientation maps
Publication: Research › Article in proceedings – 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

Deformation-induced microstructures: Analysis and relation to properties. Proceedings
Publication: Research - peer-review › Book – Annual report year: 1999

Deformation microstructure and recrystallization behaviour
Publication: Research › Article in proceedings – Annual report year: 1999

Deformation microstructures and textures in steels - Discussion
Publication: Research - peer-review › Journal article – Annual report year: 1999

Development of microstructure in FCC metals during cold work
Publication: Research - peer-review › Journal article – Annual report year: 1999

Effect of grain orientation on deformation structure and recrystallization behaviour of tensile strained copper
Publication: Research › Article in proceedings – Annual report year: 1999

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

Mikrostrukturel modellering af industriel valsning
Publication: Research › Article in proceedings – Annual report year: 1999

Modelling of microstructure evolution in hot deformation - Discussion
Publication: Research - peer-review › 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

Recrystallization kinetics of AA3104 deformed at room and elevated temperatures
Reproducibility of experimental texture measurement

Textures of AA3104 deformed by plane strain compression at multiple temperatures

The effect of rolling draughts on texture and microstructure in aluminium

The effect of rolling draughts on texture and microstructure in aluminium

Characterization of through-thickness texture variations in cold-rolled aluminium

Deformation microstructure and texture evolution and its effects on flow stress anisotropy and annealing behaviour (invited lecture)

Effect of grain orientation on deformation structure in cold-rolled polycrystalline aluminium

Formation of fine grains in aluminium deformed to large strains

Future trends: Texture analysis for structure-sensitive properties

Hot and cold deformed aluminium: Deformation microstructure and recrystallization behaviour (Invited paper)

Investigation of medium to high strain deformation microstructures using an automated electron backscattering pattern (EBSP) system

Microstructure development in single-phase materials - applications
Juul Jensen, D. & Hansen, N. 1998
Microtexture and microstructure investigations by orientation imaging microscopy (OIM)
Publication: Research › Article in proceedings – Annual report year: 1998

Modern modelling of recrystallization
Publication: Research › Article in proceedings – Annual report year: 1998

Optimization of properties in metals by thermomechanical processing. New possibilities by synchrotron radiation (invited lecture)
Publication: Research › Conference abstract in proceedings – Annual report year: 1998

Orientation pinning during growth
Publication: Research › Article in proceedings – Annual report year: 1998

Slip pattern, microstructure and local crystallography in an aluminium single crystal of brass orientation #left brace#110#right brace#
Publication: Research › Journal article – Annual report year: 1998

Slip pattern, microstructure and local crystallography in an aluminium single crystal of copper orientation #left brace#112#right brace#
Publication: Research › Journal article – Annual report year: 1998

Strain Distribution and Texture Inhomogeneities in Rolled Aluminium
Publication: Research - peer-review › Article in proceedings – Annual report year: 1998

The migration of high angle grain boundaries during recrystallization
Publication: Research - peer-review › Journal article – 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

Deformation induced dislocation boundaries: Alignment and effect on mechanical properties
Publication: Research - peer-review › Conference article – Annual report year: 1997
Anisotrope mekaniske egenskaber
Juul Jensen, D. 1997
Publication: Research › Conference abstract for conference – 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 orientation mapping by scanning and transmission electron microscopy
Publication: Research › Journal article – Annual report year: 1997

Can we make and do we need a 3-D x-ray microscope
Juul Jensen, D. 1997
Publication: Research › Conference abstract for conference – Annual report year: 1997

Current issues in recrystallization: A review
Publication: Research - peer-review › Journal article – Annual report year: 1997

Dense dislocation walls and microbands aligned with slip planes - theoretical considerations
Publication: Research › Journal article – Annual report year: 1997

Effects of orientation correlations on misorientation distributions in cold-deformed aluminium
Publication: Research - peer-review › Conference article – Annual report year: 1997

Grain boundary mobility during recrystallization of copper
Publication: Research - peer-review › Journal article – Annual report year: 1997

Growth during recrystallization
Publication: Research › Conference abstract in proceedings – Annual report year: 1997

Growth effects on microstructure and texture development during recrystallization
Publication: Research › Article in proceedings – Annual report year: 1997

Growth in heavily deformed FCC metals: Effects of orientation pinning
Publication: Research › Article in proceedings – Annual report year: 1997

Hvad sker der i et metal når det rekristalliserer?
Juul Jensen, D. 1997
Publication: Research › Conference abstract for conference – Annual report year: 1997
Karakterisering og modellering af rekrystallisation
Publication: Research › Article in proceedings – Annual report year: 1997

Modelling flow stress anisotropy caused by deformation induced dislocation boundaries
Publication: Research › Journal article – Annual report year: 1997

Nye karakteriseringsmetoder til materiale struktur og egenskaber
Juul Jensen, D. 1997
Publication: Research › Conference abstract for conference – Annual report year: 1997

Orientation aspects of growth during recrystallization
Juul Jensen, D. 1997 Roskilde: Risø National Laboratory. (Denmark. Forskningscenter Risoe. Risoe-R; No. 978(EN)).
Publication: Research › Doctoral thesis – Annual report year: 1997

Simulation of recrystallization microstructures and textures: Effects of preferential growth
Publication: Research - peer-review › Journal article – 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

Annealing behavior of dilute aluminum-alloys following hot deformation
Publication: Research - peer-review › Journal article – Annual report year: 1996

Applications of EBSP technique
Juul Jensen, D. 1996
Publication: Research › Conference abstract for conference – Annual report year: 1996

Applications of OIM in SEM and TEM
Juul Jensen, D. 1996
Publication: Research › Conference abstract for conference – Annual report year: 1996

Deformation induced changes in microstructure, local orientation and bulk texture
Publication: Research › Article in proceedings – Annual report year: 1996

Deformation microstructure and texture in hot worked aluminium alloys
Vernon-Parry, K. D., Furu, T., Juul Jensen, D. & Humphreys, F. J. 1996 In : Materials Science and Technology. 12, p. 889-896
Publication: Research - peer-review › Journal article – Annual report year: 1997

Dislocation structures in deformed metals
EBSP studies of growth rates during recrystallization

Effect of texture on the development of grain size distribution during normal grain growth

Effects of anisotropic impingement on recrystallization texture, microstructure and kinetics

Growth in heavily deformed FCC metals and effects hereof on microstructural and texture development
Juul Jensen, D. 1996

High energy synchrotron radiation: a new tool for texture and strain determinations

Investigation of local texture by high energy synchrotron radiation

Local structure determination in polycrystalline materials using high energy synchrotron radiation

Local texture analysis using high energy synchrotron radiation

Materials science

Orientation imaging microscopy (OIM) as a method to investigate deformation microstructure in cold rolled aluminium polycrystals
Quantification of microstructural evolution and texture development during recrystallization

The deformation behaviour of grain boundary regions in polycrystalline aluminium

Axisymmetric textures in alumina

EBSP studies of growth rates during recrystallization

Effects of orientation on growth during recrystallization

Growth rates and misorientation relationships between growing nuclei/grains and the surrounding deformed matrix during recrystallization

Influence of localised glide on the recrystallisation of a channel die deformed (211)[111] orientation aluminium single crystal

Microstructural and crystallographic aspects of recrystallization. Proceedings

Microstructural subdivision during cold and hot deformation. A short overview

Microstructure and local crystallography of cold rolled aluminium

Modelling microstructure and texture development during recrystallization

Modern diffraction techniques for measurements of residual strain and texture
Quantifying recrystallization nucleation and growth kinetics of cold-worked copper by microstructural analysis

Recrystallization kinetics in copper: Comparison between techniques

Simulation of recrystallization microstructures and textures in multiple texture component materials

Synchrotron radiation diffraction: A novel tool for recrystallization studies in bulk μm³ sized local areas

Automated determination of crystal orientations from electron backscattering patterns

Annealing textures in aluminium deformed by hot plane strain compression

Automated EBSP studies of deformation microstructures

Automatic recognition of deformed and recrystallized regions in partly recrystallized samples using electron back scattering patterns

Comparison of texture measurements on two phase α/β-brass obtained by x-ray and neutron diffraction

Deformation microstructures in channel-die compressed aluminium crystals

Flange thickness in a radial extruded tubular component - strain state, texture and strain models
Flow stress anisotropy in coarse grained aluminium

Publication: Research › Article in proceedings – Annual report year: 1994

Flow stress of Al-SiC composites deformed to a large range of strains

Publication: Research › Article in proceedings – Annual report year: 1994

Grain subdivision during deformation of polycrystalline aluminium

Publication: Research - peer-review › Conference article – Annual report year: 1994

Hardening behaviour of metal matrix composites coupled to numerical predictions

Publication: Research › Article in proceedings – Annual report year: 1994

Large strain deformation structures in aluminium crystals with rolling texture orientations

Publication: Research - peer-review › Journal article – Annual report year: 1994

Microstructural modelling of industrial thermomechanical processing

Publication: Research › Article in proceedings – Annual report year: 1994

Microstructural modelling of industrial thermomechanical processing of aluminium alloys

Publication: Research › Article in proceedings – Annual report year: 1994

Modeling microstructural evolution of multiple texture components during recrystallization

Publication: Research - peer-review › Journal article – Annual report year: 1994

Modeling microstructural evolution of multiple texture components during recrystallization

Publication: Research - peer-review › Article in proceedings – Annual report year: 1994

Modern diffraction techniques for measurements of residual stress and texture

Publication: Research › Conference abstract in proceedings – Annual report year: 1994

On the estimation of Cahn-Hagel interface migration rates

Publication: Research › Journal article – Annual report year: 1994
On the statistical analysis of orientation data
Publication: Research › Journal article – Annual report year: 1994

Relations between microstructure texture and mechanical properties
Publication: Research - peer-review › Book chapter – Annual report year: 1994

Textural and microstructural evolution during cold-rolling of pure nickel
Publication: Research - peer-review › Article in proceedings – Annual report year: 1994

Texture development in Al 3003 during hot plane strain compression
Publication: Research - peer-review › Conference article – Annual report year: 1994

Texture development in aluminium during hot working - experiment and simulation
Publication: Research › Article in proceedings – Annual report year: 1994

Annealing textures in aluminium deformed by hot plane strain compression
Publication: Research › Conference abstract in proceedings – Annual report year: 1993

Automatic EBSP analysis for recrystallization studies
Juul Jensen, D. 1993 In : Textures and Microstructures. 20, p. 55-65
Publication: Research - peer-review › Journal article – Annual report year: 1993

Automatic local texture measurements by EBSP
Publication: Research - peer-review › Article in proceedings – Annual report year: 1993

Automatic recognition of deformed and recrystallized regions in partly recrystallized samples using electron backscattering patterns
Publication: Research › Conference abstract in proceedings – Annual report year: 1993

Avanceret materialeforskning og forskningsreaktor DR3 som fælles europæisk forskningsfacilitet
Juul Jensen, D. & Kjems, J. 1993
Publication: Research › Conference abstract for conference – Annual report year: 1993

Comparison of texture measurements in two phase α/β-brass obtained by x-ray and neutron diffraction
Publication: Research › Conference abstract in proceedings – Annual report year: 1993
Deformation and recrystallization of metal matrix composites
Publication: Research - peer-review › Article in proceedings – Annual report year: 1993

Grain subdivision during deformation of polycrystalline aluminium
Publication: Research › Conference abstract in proceedings – Annual report year: 1993

Modeling microstructural evolution of multiple texture components during recrystallization
Publication: Research › Conference abstract in proceedings – Annual report year: 1993

Modelling of recrystallization in Al-2% SiC
Publication: Research - peer-review › Article in proceedings – Annual report year: 1993

Neutronspredning - et vigtigt værktøj i materialeforskningen
Publication: Communication › Journal article – Annual report year: 1993

Orientation aspects of growth during recrystallization
Juul Jensen, D. 1993
Publication: Research › Conference abstract for conference – Annual report year: 1993

Recovery of cold rolled aluminium containing SiC whiskers
Publication: Research - peer-review › Article in proceedings – Annual report year: 1993

Recovery of deformation microstructures in pure aluminium
Publication: Research - peer-review › Article in proceedings – Annual report year: 1993

Textural and microstructural evolution during cold-rolling of pure nickel
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