Jørgen Arendt Jensen - DTU Orbit (19/05/2018)

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Publications:

Accuracy and Precision of a Plane Wave Vector Flow Imaging Method in the Healthy Carotid Artery
Publication: Research - peer-review › Journal article – Annual report year: 2018

Increasing the field-of-view of row-column-addressed ultrasound transducers: Implementation of a diverging compound lens
Publication: Research - peer-review › Journal article – Annual report year: 2018

Non-invasive Estimation of Pressure Changes using 2-D Vector Velocity Ultrasound: An Experimental Study with In-Vivo Examples
Publication: Research - peer-review › Journal article – Annual report year: 2018

Probe development of CMUT and PZT row-column-addressed 2-D arrays
Publication: Research - peer-review › Journal article – Annual report year: 2018

Vector Flow Imaging Compared with Pulse Wave Doppler for Estimation of Peak Velocity in the Portal Vein
Publication: Research - peer-review › Journal article – Annual report year: 2018

Vector velocity ultrasound—a new ultrasound technique
Publication: Research - peer-review › Book chapter – Annual report year: 2018

3-D Imaging using Row–Column-Addressed 2-D Arrays with a Diverging Lens: Phantom Study
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Accuracy and Precision of Plane Wave Vector Flow Imaging for Laminar and Complex Flow In Vivo
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Advanced 3-D Ultrasound Imaging: 3-D Synthetic Aperture Imaging using Fully Addressed and Row-Column Addressed 2-D Transducer Arrays.
Publication: Research › Ph.D. thesis – Annual report year: 2017

A Methodology for Anatomic Ultrasound Image Diagnostic Quality Assessment
Publication: Research - peer-review › Journal article – Annual report year: 2016

Aortic Valve Stenosis Increases Helical Flow and Flow Complexity: A Study of Intra-operative Cardiac Vector Flow Imaging
Automatic Segmentation of Vessels in In-Vivo Ultrasound Scans
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

A Vector Flow Imaging Method for Portable Ultrasound Using Synthetic Aperture Sequential Beamforming
Publication: Research - peer-review › Journal article – Annual report year: 2017

BCB polymer based row-column addressed CMUT
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Common Carotid Artery Flow Measured by 3-D Ultrasonic Vector Flow Imaging and Validated with Magnetic Resonance Imaging
Publication: Research - peer-review › Journal article – Annual report year: 2017

Curvilinear 3-D Imaging Using Row–Column-Addressed 2-D Arrays with a Diverging Lens: Feasibility Study
Publication: Research - peer-review › Journal article – Annual report year: 2017

Directional Transverse Oscillation Vector Flow Estimation
Publication: Research - peer-review › Journal article – Annual report year: 2017

Energy Based Clutter Filtering for Vector Flow Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Evaluation of New Ultrasound Techniques for Clinical Imaging in selected Liver and Vascular Applications
Publication: Research › Ph.D. thesis – Annual report year: 2017

Experimental performance assessment of the sub-band minimum variance beamformer for ultrasound imaging
Publication: Research - peer-review › Journal article – Annual report year: 2017

Fast Plane Wave 2-D Vector Flow Imaging Using Transverse Oscillation and Directional Beamforming
Publication: Research - peer-review › Journal article – Annual report year: 2017

Fast Plane Wave Imaging
Publication: Research › Ph.D. thesis – Annual report year: 2017

High-frame-rate Imaging of a Carotid Bifurcation using a Low-complexity Velocity Estimation Approach
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Improved Focusing Method for 3-D Imaging using Row–Column-Addressed 2-D Arrays
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Output Pressure and Pulse-Echo Characteristics of CMUTs as Function of Plate Dimensions
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Portable Ultrasound Imaging
Publication: Research › Ph.D. thesis – Annual report year: 2017

Real-time Implementation of Synthetic Aperture Vector Flow Imaging on a Consumer-level Tablet
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017
Simulating CMUT Arrays Using Time Domain FEA
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Stenosis of the superficial femoral artery evaluated in-vivo with vector concentration - a novel ultrasound vector velocity derived flow parameter for measurement of flow complexity
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2017

Super-resolution Axial Localization of Ultrasound Scatter Using Multi-focal Imaging
Publication: Research - peer-review › Journal article – Annual report year: 2017

Synthetic Aperture Sequential Beamforming using Spatial Matched Filtering
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Transmitting Performance Evaluation of ASICs for CMUT-Based Portable Ultrasound Scanners
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Ultrasonic 3-D Vector Flow Method for Quantitative In Vivo Peak Velocity and Flow Rate Estimation
Publication: Research - peer-review › Journal article – Annual report year: 2017

Vector and Doppler Ultrasound Velocities Evaluated in a Flow Phantom and the Femoropopliteal Vein
Publication: Research - peer-review › Journal article – Annual report year: 2017

Vector Flow Imaging Compared with Conventional Doppler Ultrasound and Thermodilution for Estimation of Blood Flow in the Ascending Aorta
Publication: Research - peer-review › Journal article – Annual report year: 2015

Vector velocity estimation of blood flow – A new application in medical ultrasound
Publication: Research - peer-review › Journal article – Annual report year: 2017

Velocity Estimation in Medical Ultrasound [Life Sciences]
Publication: Research - peer-review › Journal article – Annual report year: 2017

Volumetric 3-D Vector Flow Measurements using a 62+62 Row-Column Addressed Array
Publication: Research - peer-review › Article in proceedings – Annual report year: 2018

3-D Imaging using Row–Column-Addressed 2-D Arrays with a Diverging Lens
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

3-D Vector Flow Estimation With Row–Column-Addressed Arrays
Publication: Research - peer-review › Journal article – Annual report year: 2016

3-D Vector Flow Imaging
Publication: Research › Ph.D. thesis – Annual report year: 2016

3-D Vector Flow Using a Row-Column Addressed CMUT Array
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Accurate Angle Estimator for High-Frame-rate 2-D Vector Flow Imaging
Publication: Research - peer-review › Journal article – Annual report year: 2016

A framework for simulating ultrasound imaging based on first order nonlinear pressure–velocity relations.
Publication: Research - peer-review › Journal article – Annual report year: 2016
Analog Gradient Beamformer for a Wireless Ultrasound Scanner.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Analysis of Systolic Backflow and Secondary Helical Blood Flow in the Ascending Aorta Using Vector Flow Imaging
Publication: Research - peer-review › Journal article – Annual report year: 2016

An improved minimum variance beamforming applied to plane-wave imaging in medical ultrasound
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

A novel array processing method for precise depth detection of ultrasound point scatter
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Automatic Ultrasound Scanning
Publication: Research › Ph.D. thesis – Annual report year: 2017

Blood flow velocity in the Popliteal Vein using Transverse Oscillation Ultrasound.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Capacitive Substrate Coupling of Row–Column-Addressed 2-D CMUT Arrays
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Elimination of Second-Harmonics in CMUTs using Square Pulse Excitation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Evaluation of healthy muscle tissue by strain and shear wave elastography – Dependency on depth and ROI position in relation to underlying bone
Publication: Research - peer-review › Journal article – Annual report year: 2016

Experimental 3-D Vector Velocity Estimation with Row-Column Addressed Arrays
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Fabrication of Capacitive Micromachined Ultrasonic Transducers Using a Boron Etch-Stop Method
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

High Frame Rate Synthetic Aperture 3D Vector Flow Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

High frame rate synthetic aperture vector flow imaging for transthoracic echocardiography.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Hybrid Segmentation of Vessels and Automated Flow Measures in In-Vivo Ultrasound Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Imaging of In-Vivo Pressure using Ultrasound
Publication: Research › Ph.D. thesis – Annual report year: 2016

Intra-operative Vector Flow Imaging Using Ultrasound of the Ascending Aorta among 40 Patients with Normal, Stenotic and Replaced Aortic Valves
Publication: Research - peer-review › Journal article – Annual report year: 2016
In Vivo High Frame Rate Vector Flow Imaging Using Plane Waves and Directional Beamforming
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Novel Automatic Detection of Pleura and B-lines (Comet-Tail Artifacts) on In-Vivo Lung Ultrasound Scans.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Optimization of Synthetic Aperture Image Quality
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Optimized Plane Wave Imaging for Fast and High-Quality Ultrasound Imaging
Publication: Research - peer-review › Journal article – Annual report year: 2016

Plane-Wave Imaging Challenge in Medical Ultrasound
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Preliminary investigation of an ultrasound method for estimating pressure changes in deep-positioned vessels.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Quantitative Measurements using Ultrasound Vector Flow Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Robust microbubble tracking for super resolution imaging in ultrasound
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Safety Assessment of Advanced Imaging Sequences II: Simulations
Publication: Research - peer-review › Journal article – Annual report year: 2015

Safety Assessment of Advanced Imaging Sequences I: Measurements
Publication: Research - peer-review › Journal article – Annual report year: 2016

Surveillance for hemodialysis access stenosis: usefulness of ultrasound vector volume flow
Publication: Research - peer-review › Journal article – Annual report year: 2016

Synthetic aperture ultrasound Fourier beamformation using virtual sources
Publication: Research - peer-review › Journal article – Annual report year: 2016

Synthetic Aperture Vector Flow Imaging
Publication: Research › Ph.D. thesis – Annual report year: 2016

System-Level Design of an Integrated Receiver Front End for a Wireless Ultrasound Probe
Publication: Research - peer-review › Journal article – Annual report year: 2016

Ultralydskanning er førstevalg ved mistanke om kronisk venesygdom i underekstremiteterne
Publication: Research - peer-review › Journal article – Annual report year: 2016

Ultrasound Vector Flow Imaging: Part II: Parallel Systems
Publication: Research - peer-review › Journal article – Annual report year: 2016

Ultrasound Vector Flow Imaging: Part I: Sequential Systems
Publication: Research - peer-review › Journal article – Annual report year: 2016
Vector Velocity Estimation for Portable Ultrasound using Directional Transverse Oscillation and Synthetic Aperture Sequential Beamforming
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Vector velocity volume flow estimation: Sources of error and corrections applied for arteriovenous fistulas
Publication: Research - peer-review › Journal article – Annual report year: 2016

Volumetric Synthetic Aperture Imaging with a Piezoelectric 2-D Row-Column Probe.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

3-D Imaging Using Row-Column-Addressed Arrays With Integrated Apodization: Part II: Transducer Fabrication and Experimental Results
Publication: Research - peer-review › Journal article – Annual report year: 2015

Publication: Research - peer-review › Journal article – Annual report year: 2015

3-D Vector Velocity Estimation with Row-Column Addressed Arrays
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Acoustical cross-talk in row–column addressed 2-D transducer arrays for ultrasound imaging
Publication: Research - peer-review › Journal article – Annual report year: 2015

Advanced automated gain adjustments for in-vivo ultrasound imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

A hand-held row-column addressed CMUT probe with integrated electronics for volumetric imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Assessment of flatness of assumed planar surfaces for ultrasound investigation of elastic surfaces
Publication: Research - peer-review › Conference article – Annual report year: 2015

Automated Hierarchical Time Gain Compensation for In Vivo Ultrasound Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Clinical evaluation of synthetic aperture harmonic imaging for scanning focal malignant liver lesions
Publication: Research - peer-review › Journal article – Annual report year: 2015

Convex Array Vector Velocity Imaging Using Transverse Oscillation and Its Optimization
Publication: Research - peer-review › Journal article – Annual report year: 2015

Electrostatic and Small-Signal Analysis of CMUTs With Circular and Square Anisotropic Plates
Publication: Research - peer-review › Journal article – Annual report year: 2015

First Clinical Investigations of New Ultrasound Techniques in Three Patient Groups: Patients with Liver Tumors, Arteriovenous Fistulas, and Arteriosclerotic Femoral Arteries
Publication: Research › Ph.D. thesis – Annual report year: 2014

Fourier beamformation of multistatic synthetic aperture ultrasound imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015
High Frame Rate Vector Velocity Estimation using Plane Waves and Transverse Oscillation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

High Resolution Depth-Resolved Imaging From Multi-Focal Images for Medical Ultrasound
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Image Quality Degradation from Transmit Delay Profile Quantization
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Implementation of real-time duplex synthetic aperture ultrasonography
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Improved Vector Velocity Estimation using Directional Transverse Oscillation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Increased Frame Rate for Plane Wave Imaging Without Loss of Image Quality
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

In Vivo 3-D Vector Velocity Estimation with Continuous Data
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

In Vivo High Dynamic Range Vector Flow Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

In Vivo Real Time Volumetric Synthetic Aperture Ultrasound Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Micromachined Ultrasonic Transducers for 3-D Imaging
Publication: Research › Ph.D. thesis – Annual report year: 2015

Non-invasive Estimation of Pressure Changes along a Streamline using Vector Velocity Ultrasound
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Output pressure and harmonic characteristics of a CMUT as function of bias and excitation voltage
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Surveillance of Hemodialysis Vascular Access with Ultrasound Vector Flow Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Transverse oscillation vector flow imaging for transthoracic echocardiography
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Ultrasound Velocity Imaging
Publication: Research - peer-review › Book chapter – Annual report year: 2015

Utilizing 3-D and 4-D ultrasound systems to improve radiation treatment of cervix and prostate cancer patients.
Publication: Research › Ph.D. thesis – Annual report year: 2016

Vector flow imaging of the ascending aorta. Are systolic backflow and atherosclerosis related?
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015
Velocity Estimation of the Main Portal Vein with Transverse Oscillation.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Volumetric Ultrasound Imaging with Row-Column Addressed 2-D Arrays Using Spatial Matched Filter Beamforming
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Angle independent velocity spectrum determination.
Publication: Research › Patent – Annual report year: 2012

Ultrasound imaging probe with sigma-delta beamformer and apodization therein
Publication: Research › Patent – Annual report year: 2012

2-D Tissue Motion Compensation of Synthetic Transmit Aperture Images
Publication: Research - peer-review › Journal article – Annual report year: 2014

3-D Velocity Estimation for Two Planes in vivo
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Accuracy and Sources of Error for an Angle Independent Volume Flow Estimator
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

A comparison between temporal and subband minimum variance adaptive beamforming
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Adaptive Multi-Lag for Synthetic Aperture Vector Flow Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Advanced 3-D Ultrasound Imaging.: 3-D Synthetic Aperture Imaging and Row-column Addressing of 2-D Transducer Arrays
Publication: Research › Ph.D. thesis – Annual report year: 2014

A Multi-threaded Version of Field II
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

A phantom study on temporal and subband Minimum Variance adaptive beamforming
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

A Transverse Oscillation Approach for Estimation of Three-Dimensional Velocity Vectors, Part I: Concept and Simulation Study
Publication: Research - peer-review › Journal article – Annual report year: 2014

A Transverse Oscillation Approach for Estimation of Three-Dimensional Velocity Vectors, Part II: Experimental Validation
Publication: Research - peer-review › Journal article – Annual report year: 2014

Clinical evaluation of Synthetic Aperture Sequential Beamforming and Tissue Harmonic Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Clinical evaluation of synthetic aperture sequential beamforming ultrasound in patients with liver tumors
Publication: Research - peer-review › Journal article – Annual report year: 2015

Comparison of 3-D Synthetic Aperture Phased-Array Ultrasound Imaging and Parallel Beamforming
Publication: Research - peer-review › Journal article – Annual report year: 2014
Comparison of Vector Velocity Imaging using Directional Beamforming and Transverse Oscillation for a Convex Array Transducer
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Data adaptive estimation of transversal blood flow velocities
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Determining inter-fractional motion of the uterus using 3D ultrasound imaging during radiotherapy for cervical cancer
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Dimensional Scaling for Optimized CMUT Operations
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

First report on intraoperative vector flow imaging of the heart among patients with healthy and diseased aortic valves
Publication: Research - peer-review › Journal article – Annual report year: 2014

Implementation of synthetic aperture imaging on a hand-held device
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Increasing the Dynamic Range of Synthetic Aperture Vector Flow Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Investigation of PDMS as coating on CMUTs for Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

In-vivo Convex Array Vector Flow Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

In-Vivo Synthetic Aperture and Plane Wave High Frame Rate Cardiac Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Micromachined Integrated Transducers for Ultrasound Imaging
Publication: Research › Ph.D. thesis – Annual report year: 2014

Modal radiation patterns of baffled circular plates and membranes
Publication: Research - peer-review › Journal article – Annual report year: 2014

Noninvasive estimation of 2-D pressure gradients in steady flow using ultrasound
Publication: Research - peer-review › Journal article – Annual report year: 2014

Non-invasive Estimation of Pressure Gradients in Pulsatile Flow using Ultrasound
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Novel flow quantification of the carotid bulb and the common carotid artery with vector flow ultrasound.
Publication: Research - peer-review › Journal article – Annual report year: 2015

Performance evaluation of compounding and directional beamforming techniques for carotid strain imaging using plane wave transmissions
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014
Rapid Measurements of Intensities for Safety Assessment of Advanced Imaging Sequences  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Real-Time GPU Implementation of Transverse Oscillation Vector Velocity Flow Imaging  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Row-Column Addressed 2-D CMUT Arrays with Integrated Apodization  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Row-Column Addressed 2-D CMUT Arrays with Integrated Apodization  
Publication: Research › Sound/Visual production (digital) – Annual report year: 2014

Simulation and Efficient Measurements of Intensities for Complex Imaging Sequences  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Simulation Study of Real Time 3-D Synthetic Aperture Sequential Beamforming for Ultrasound Imaging  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Synthetic Aperture Sequential Beamforming implemented on multi-core platforms  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Thermal Oxidation of Structured Silicon Dioxide  
Publication: Research - peer-review › Journal article – Annual report year: 2014

Tissue Harmonic Synthetic Aperture Ultrasound Imaging  
Publication: Research - peer-review › Journal article – Annual report year: 2014

Transverse Spectral Velocity Estimation  
Publication: Research › Journal article – Annual report year: 2014

Ultrasound Evaluation of an Abdominal Aortic Fluid-Structure Interaction Model  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Volume Flow In Arteriovenous Fistulas Using Vector Velocity Ultrasound  
Publication: Research - peer-review › Journal article – Annual report year: 2014

Three dimensional (3d) transverse oscillation vector velocity ultrasound imaging.  
Publication: Research › Patent – Annual report year: 2011

2-D Row-Column CMUT Arrays with an Open-Grid Support Structure  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

3-D Ultrasound Imaging Performance of a Row-Column Addressed 2-D Array Transducer: A Measurement Study  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

3D ultrasound imaging performance of a row-column addressed 2D array transducer: a simulation study  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

A Delta-Sigma beamformer with integrated apodization  
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013
Fast simulation of non-linear pulsed ultrasound fields using an angular spectrum approach
Publication: Research - peer-review › Journal article – Annual report year: 2013

High frame rate synthetic aperture duplex imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

In-situ identification of marine organisms using high frequency, wideband ultrasound
Publication: Research › Ph.D. thesis – Annual report year: 2013

Internal strain estimation for quantification of human heel pad elastic modulus: A phantom study
Publication: Research › Journal article – Annual report year: 2013

Inter-operator Variability in Defining Uterine Position Using Three-dimensional Ultrasound Imaging
Publication: Research › Article in proceedings – Annual report year: 2013

Intraoperative Cardiac Ultrasound Examination Using Vector Flow Imaging
Publication: Research › Journal article – Annual report year: 2013

Intraoperative Vector Flow Imaging of the Heart
Publication: Research › Article in proceedings – Annual report year: 2013

Investigation of an angular spectrum approach for pulsed ultrasound fields
Publication: Research - peer-review › Journal article – Annual report year: 2013

In Vivo Three-Dimensional Velocity Vector Imaging and Volumetric Flow Rate Measurements
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Modeling and Measurements of CMUTs with Square Anisotropic Plates
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

New Developments in Vector Velocity Imaging using the Transverse Oscillation Approach
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Non-invasive Measurement of Pressure Gradients in Pulsatile Flow using Ultrasound
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Non-invasive measurement of pressure gradients using ultrasound
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Optimization of Transverse Oscillating Fields for Vector Velocity Estimation with Convex Arrays
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Preliminary examples of 3D vector flow imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Preliminary study of synthetic aperture tissue harmonic imaging on in-vivo data
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Real Time Deconvolution of In-Vivo Ultrasound Images
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014
SARUS: A Synthetic Aperture Real-Time Ultrasound System
Publication: Research - peer-review › Journal article – Annual report year: 2013

Sequential Beamforming Synthetic Aperture Imaging
Publication: Research - peer-review › Journal article – Annual report year: 2013

Spectral Velocity Estimation in the Transverse Direction
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Synthetic aperture flow imaging using dual stage beamforming: Simulations and experiments
Publication: Research - peer-review › Journal article – Annual report year: 2013

Tissue Harmonic Synthetic Aperture Imaging
Publication: Research › Ph.D. thesis – Annual report year: 2014

Vector Volume Flow in Arteriovenous Fistulas
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Void-Free Direct Bonding of CMUT Arrays with Single Crystalline Plates and Pull-In Insulation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Harmonic ultrasound imaging using synthetic aperture sequential beamforming
Publication: Research › Patent – Annual report year: 2011

In Vivo Evaluation of Synthetic Aperture Sequential Beamforming
Publication: Research - peer-review › Journal article – Annual report year: 2011

3D vector flow imaging
Publication: Research › Ph.D. thesis – Annual report year: 2012

Age and gender related differences in aortic blood flow
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

A Method for Direct Localized Sound Speed Estimates Using Registered Virtual Detectors
Publication: Research - peer-review › Journal article – Annual report year: 2012

Clinical evaluation of synthetic aperture sequential beamforming
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Comparison of 3D Synthetic Aperture Imaging and Explososcan using Phantom Measurements
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Comparison of Real-Time In Vivo Spectral and Vector Velocity Estimation
Publication: Research - peer-review › Journal article – Annual report year: 2012

Compounding in synthetic aperture imaging
Publication: Research - peer-review › Journal article – Annual report year: 2012

Computational fluid dynamics using in vivo ultrasound blood flow measurements
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012
Imaging blood's velocity using synthetic aperture ultrasound
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Implementation of a versatile research data acquisition system using a commercially available medical ultrasound scanner
Publication: Research - peer-review › Journal article – Annual report year: 2012

Implementation of Tissue Harmonic Synthetic Aperture Imaging on a Commercial Ultrasound System
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

In vivo color flow mapping using synthetic aperture dual stage beamforming
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Measuring 3D Velocity Vectors using the Transverse Oscillation Method
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Methods and systems for producing compounded ultrasound images
Publication: Research › Patent – Annual report year: 2012

Modelling of CMUTs with Anisotropic Plates
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Multilayer piezoelectric transducer models combined with Field II
Publication: Research - peer-review › Journal article – Annual report year: 2012

Optimizing Synthetic Aperture Compound Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Patient-Specific Simulation Models of the Abdominal Aorta With and Without Aneurysms
Publication: Research › Ph.D. thesis – Annual report year: 2012

Phased-array vector velocity estimation using transverse oscillations
Publication: Research - peer-review › Journal article – Annual report year: 2012

Preliminary comparison of 3D synthetic aperture imaging with Explososcan
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Quantification of In Vivo 2D Vector Flow Ultrasound
Publication: Research › Ph.D. thesis – Annual report year: 2012

Shadow effects in simulated ultrasound images derived from computed tomography images using a focused beam tracing model
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Publication: Research - peer-review › Article in proceedings – Annual report year: 2002

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Publication: Research - peer-review › Book chapter – Annual report year: 2002

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Publication: Research - peer-review › Article in proceedings – Annual report year: 2002

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Publication: Research - peer-review › Article in proceedings – Annual report year: 2001
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Publication: Research - peer-review › Article in proceedings – Annual report year: 2001

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Publication: Research - peer-review › Article in proceedings – Annual report year: 2001

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Publication: Research - peer-review › Journal article – Annual report year: 2001

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Publication: Research - peer-review › Article in proceedings – Annual report year: 2001

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Publication: Research - peer-review › Journal article – Annual report year: 2000

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Publication: Research - peer-review › Article in proceedings – Annual report year: 2000

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Publication: Research › Patent – Annual report year: 2000

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Publication: Research - peer-review › Article in proceedings – Annual report year: 2000

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Publication: Research - peer-review › Article in proceedings – Annual report year: 1999

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Publication: Research - peer-review › Article in proceedings – Annual report year: 1996
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Publication: Research › Report – Annual report year: 1992

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Publication: Research › Report – Annual report year: 1991

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Publication: Research - peer-review › Article in proceedings – Annual report year: 1991

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Publication: Research - peer-review › Article in proceedings – Annual report year: 1991

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Publication: Research - peer-review › Article in proceedings – Annual report year: 1991
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Publication: Research - peer-review › Journal article – Annual report year: 1984

Projects:

Deep learning in Medical Ultrasound Imaging
Project: PhD

Modelling of Cardiac Biomechanics
Project: PhD

3D Ultrasound Cardiac Vector Flow Imaging
Project: PhD

Perfusion Ultrasound Imaging
Project: PhD

Micromachined 2D Transducers and Phantoms for 3D Super-resolution Ultrasound Imaging
Project: PhD

Micromachined Integrated 2D Transducers for Ultrasound Imaging
Project: PhD

Micromachined Integrated 2D Transducers for Ultrasound Imaging
Project: PhD
Micromachined Integrated Transducers for Ultrasound Imaging
Project: PhD

Portable Ultrasound Imaging
Project: PhD

Fast Plane Wave Imaging
Project: PhD

Advanced 3D ultrasound imaging
Project: PhD

Automatic ultrasound scanning
Project: PhD

3D Vector Velocity Imaging
Project: PhD

Optimal synthetic aperture duplex imaging
Project: PhD

Imaging of in-vivo pressure using ultrasound
Project: PhD

Improved radiotherapy utilizing 3D and 4D ultrasound imaging techniques
Project: PhD

Micromachined Ultrasonic Transducer Arrays for 3D Imaging
Project: PhD

Micromachined Integrated Transducers for Ultrasound Imaging
Project: PhD

Two stage beam forming methods for 3D imaging
Project: PhD

Non-linear SA Imaging
Project: PhD

Synthetic aperture flow imaging using a dual beamformer approach
Project: PhD

3D Vector Flow Imaging
Project: PhD

Implementation of synthetic aperture ultrasound methods
Project: PhD

In situ identification of marine organisms using High Frequency, wideband Ultrasound
Project: PhD
Computational management of stent-graft based minimally invasive aortic aneurysm repairs
Project: PhD

Image processing in medical ultrasound
Project: PhD

Non-linear ultrasound imaging
Project: PhD

Calibrated modelling of ultrasonic fields using Field II
Project: PhD

Adaptiv Fokusering i Medicinsk Ultralyd
Project: PhD

3D Synthetic Aperture Imaging and Implementation
Project: PhD

Non-invasive in-vivo Spatial Pressure Measurement in Real Time
Project: PhD

Implementation of Synthetic Aperture Imaging
Project: PhD

Synthetic Aperture Vector Flow Imaging
Project: PhD

Estimation of Transverse Blood Flow using Ultrasound
Project: PhD

Ultrasound flow imaging using coded signals
Project: PhD

Design and implementation of Algorithms for Improving Synthetic Aperture Ultrasound Images
Project: PhD

Ikke-lineær Ultralyd Billedannelse
Project: PhD

Integrated circuits in medical ultrasound
Project: PhD

Hurtig signalbehandling med PFGA kredse for 3D-ultralydscanning
Project: PhD

Magnetic scanning of peripheral nerve activity - A new tool in clinical neurophysiology
Project: PhD

Three-dimensional real-time ultrasound imaging
Project: PhD
Fast ultrasound imaging using coded signals
Project: PhD

Center for Fast Ultrasound Imaging
Project

Udvikling af karakterisering af algoritmer til estimation af blodhastighed med ultralyd
Project: PhD

Thomas B. Thriges Center for Microinstruments
Project

Graduate School in Microelectronics
Project

Estimation af hastighedsvektor ved anvendelse af ultralyd
Project: PhD

Ultrasound blood velocity estimation
Project

Simulation of ultrasound fields and systems
Project