Publications:

**Gabor frames on locally compact abelian groups and related topics**
Publication: Research › Ph.D. thesis – Annual report year: 2017

**On multivariate Wilson bases**
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

**On Wilson bases in $L^2(\mathbb{R}^d)$**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**System bandwidth and the existence of generalized shift-invariant frames**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Co-compact Gabor Systems on Locally Compact Abelian Groups**
Publication: Research - peer-review › Journal article – Annual report year: 2015

**Counterexamples to the B-spline Conjecture for Gabor Frames**
Publication: Research - peer-review › Journal article – Annual report year: 2016

**Explicit constructions and properties of generalized shift-invariant systems in $L^2(\mathbb{R})$**
Publication: Research - peer-review › Journal article – Annual report year: 2016

**On some Hermite series identities and their applications to Gabor analysis**
Publication: Research - peer-review › Journal article – Annual report year: 2016

**Reproducing formulas for generalized translation invariant systems on locally compact abelian groups**
Publication: Research - peer-review › Journal article – Annual report year: 2016

**Wavelets for Non-expanding Dilations and the Lattice Counting Estimate**
Publication: Research - peer-review › Journal article – Annual report year: 2016

**A characterization of tight and dual generalized translation invariant frames**
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015
Density and duality theorems for regular Gabor frames
Publication: Research - peer-review › Journal article – Annual report year: 2015

Duality results for co-compact Gabor systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Prime tight frames
Publication: Research - peer-review › Journal article – Annual report year: 2012

Sparse Matrices In Frame Theory
Publication: Research - peer-review › Journal article – Annual report year: 2012

Sparsity and spectral properties of dual frames
Publication: Research - peer-review › Journal article – Annual report year: 2012

Constructing pairs of dual bandlimited frame wavelets in $L^2(\mathbb{R}^n)$
Publication: Research - peer-review › Journal article – Annual report year: 2011

Optimally sparse approximations of 3D functions by compactly supported shearlet frames
Publication: Research - peer-review › Journal article – Annual report year: 2012

Oversampling of wavelet frames for real dilations
Publication: Research - peer-review › Journal article – Annual report year: 2011

Shearlets and Optimally Sparse Approximations
Publication: Research - peer-review › Book chapter – Annual report year: 2012

Affine and quasi-affine frames for rational dilations
Publication: Research - peer-review › Journal article – Annual report year: 2011

Constructing pairs of dual bandlimited framelets with desired time localization
Publication: Research - peer-review › Journal article – Annual report year: 2009

Wavelet frames and their duals
Publication: Research › Ph.D. thesis – Annual report year: 2008

Constructing pairs of dual bandlimited framelets with desired time localization
Publication: Research › Report – Annual report year: 2007

The canonical and alternate duals of a wavelet frame
Publication: Research - peer-review › Journal article – Annual report year: 2007

The canonical and alternate duals of a wavelet frame
Publication: Research › Poster – Annual report year: 2007

The canonical and alternate duals of a wavelet frame
Publication: Research › Sound/Visual production (digital) – Annual report year: 2007

The canonical and alternate duals of a wavelet frame
Publication: Research › Conference abstract for conference – Annual report year: 2007
The canonical and alternate duals of a wavelet frame
Publication: Research › Conference abstract for conference – Annual report year: 2007

The canonical and alternate duals of a wavelet frame
Publication: Research › Report – Annual report year: 2006

Projects:

The frame set for Gabor systems generated by B-splines
Project: PhD

Mathematc and Efficient Signal Representation
Project: PhD

Gabor Frames, their Duals and Applications in Engineering
Project: PhD

Wavelet Frames in theory and Practice
Project: PhD

Activities:

On multivariate Wilson bases
Activity: Talks and presentations › Conference presentations