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 $L^2(\mathbb{R})$  
Christensen, O., Hasannasabjaldehbakhani, M. & Lemvig, J. 2016 In : Advances in Computational Mathematics. 43, 2, p. 443–472
Publication: Research - peer-review › Journal article – Annual report year: 2016

On some Hermite series identities and their applications to Gabor analysis  
Lemvig, J. 2016 In : Monatshefte fuer Mathematik. 182, 4, p. 899–912
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
Lemvig, J., Krahmer, F. & Kutyniok, G. 2014 *Computational Statistics.* 29, 3-4, p. 547-568
Publication: Research - peer-review › Journal article – Annual report year: 2012

Sparsity and spectral properties of dual frames
Krahmer, F., Kutyniok, G. & Lemvig, J. 2013 *Linear Algebra and Its Applications.* 439, 4, p. 982–998
Publication: Research - peer-review › Journal article – Annual report year: 2012

Constructing pairs of dual bandlimited frame wavelets in $L^2(\mathbb{R}^n)$
Lemvig, J. 2012 *Applied and Computational Harmonic Analysis.* 32, 3, p. 313-328
Publication: Research - peer-review › Journal article – Annual report year: 2011

Optimally sparse approximations of 3D functions by compactly supported shearlet frames
Kutyniok, G., Lim, W-Q. & Lemvig, J. 2012 *SIAM Journal on Mathematical Analysis.* 44, 4, p. 2962-3017
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
Lemvig, J. 2007
Publication: Research › Poster – Annual report year: 2007

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

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

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

The frame set for Gabor systems generated by B-splines
Nielsen, K. H., Lemvig, J. & Christensen, O.
01/08/2016 → 31/07/2019
Project: PhD

Mathematic and Efficient Signal Representation
Hasannasabjaldehbakhani, M., Christensen, O. & Lemvig, J.
01/12/2015 → 30/11/2018
Project: PhD

Gabor Frames, their Duals and Applications in Engineering
Jakobsen, M. S., Christensen, O., Lemvig, J., Knudsen, K., Feichtinger, H. & Hernández, E.
01/10/2013 → 23/11/2016
Project: PhD

Wavelet Frames in theory and Practice
Lemvig, J., Christensen, O., Hansen, P. C., Goh, S. S. & Laugesen, R. S.
01/08/2005 → 05/11/2008
Project: PhD

Activities: