


Aggrawal, HO, Andersen, MS, Rose, S & Sidky, EY 2017, 'A Convex Reconstruction Model for X-ray Tomographic Imaging with Uncertain Flat-fields' IEEE Transactions on Computational Imaging. DOI: 10.1109/TCI.2017.2723246


Quinto, T 2017, 'Artifacts and Visible Singularities in Limited Data X-Ray Tomography' Sensing and Imaging, vol 18, no. 1. DOI: 10.1007/s11220-017-0158-7


Codas, A, Hanssen, KG, Foss, B, Capolei, A & Jørgensen, JB 2017, 'Multiple shooting applied to robust reservoir control optimization including output constraints on coherent risk measures' *Computational Geosciences*, vol 21, no. 3, pp. 479-497. DOI: 10.1007/s10596-017-9625-4


Ruiz Pujadas, E, Piella, G, Kjer, HM & GonzÁlez Ballester, MA 2017, 'Random walks with statistical shape prior for cochlea and inner ear segmentation in micro-CT images' *Machine Vision & Applications*, pp. 1-10. DOI: 10.1007/s00138-017-0891-x


Ranjan, A, Wendt, SL, Schmidt, S, Madsbad, S, Holst, JJ, Madsen, H, Knudsen, CB, Jørgensen, JB & Nørgaard, K 2017, 'Relationship between Optimum Mini-doses of Glucagon and Insulin Levels when Treating Mild Hypoglycaemia in Patients with Type 1 Diabetes - A Simulation Study' *Basic & Clinical Pharmacology & Toxicology*, pp. n/a-n/a. DOI: 10.1111/bcpt.12907


Jørgensen, JS, Coban, SB, Lionheart, WRB, McDonald, SA & Withers, PJ 2017, 'SparseBeads data: benchmarking sparsity-regularized computed tomography' Measurement Science and Technology, vol 28, no. 12, 124005. DOI: 10.1088/1361-6501/aa8c29

Karamehmedovic, M, Chen, X & Karamehmedovic, M 2017, 'Stochastic derivation and solution of simplified radiative transfer using the Fokker-Planck equation'


Sciacchitano, F, Dong, Y & Andersen, MS 2017, 'Total Variation Based Parameter-Free Model for Impulse Noise Removal' Numerical Mathematics-theory Methods and Applications, vol 10, no. 1, pp. 186-204. DOI: 10.4208/nmtma.2017.m1613

Borg, L, Jørgensen, JS & Sporring, J 2017, Towards characterizing and reducing artifacts caused by varying projection truncation.


Karamehmedovic, M 2016, 'An analytic mapping property of the Dirichlet-to-Neumann operator in Helmholtz boundary problems' 27th Nordic Congress of Mathematicians, Stockholm, Sweden, 16/03/2016 - 20/03/2016,


Mei, J-J, Dong, Y, Huang, T-Z & Yin, W 2016, Cauchy Noise Removal by Nonconvex ADMM with Convergence Gaurantees. Technical University of Denmark (DTU), Kgs. Lyngby. DTU Compute-Technical Report-2016, no. 10


Fosbøl, PL, Gladis, A, Thomsen, K, Gaspar, J & von Solms, N 2016, ‘Enzymes in CO2 Capture’ 3rd Conference on Carbon Capture and Storage (UTCSS-3), Austin, United States, 17/02/2016 - 19/02/2016,


Petersen, LN, Poulsen, NK, Niemann, HH, Utzen, C & Jørgensen, JB 2016, Industrial application of model predictive control to a milk powder spray drying plant. in Proceedings of the 15th annual European Control Conference (ECC ’16). IEEE, pp. 1038-1044. DOI: 10.1109/ECC.2016.7810426


Wendt, SL, Boye Knudsen, C, Jørgensen, JB, Madsen, H & Haidar, A 2016, ‘Modelling the glucose-insulin-glucagon dynamics after subcutaneous administration of native glucagon and a novel glucagon analogue in dogs’ 9th International Conference on Advanced Technologies and Treatments for Diabetes (ATTD 2016), Milan, Italy, 03/02/2016 - 06/02/2016,

Wendt, SL, Boye Knudsen, C, Jørgensen, JB, Madsen, H & Haidar, A 2016, ‘Modelling the glucose-insulin-glucagon dynamics after subcutaneous administration of native glucagon and a novel glucagon analogue in dogs’ 9th International Conference on Advanced Technologies and Treatments for Diabetes (ATTD 2016), Milan, Italy, 03/02/2016 - 06/02/2016,


Christensen, MLC, Villa, U, Engsig-Karup, AP & Vassilevski, P 2016, ‘Nonlinear Multigrid solver exploiting AMGe Coarse Spaces with Approximation Properties’ 14th Copper Mountain Conference on Iterative Methods (2016), Copper Mountain, Colorado, United States, 20/03/2016 - 25/03/2016,


Boiroux, D, Aradóttir, TB, Hagdrup, M, Poulsen, NK, Madsen, H & Jørgensen, JB 2015, 'A Bolus Calculator Based on Continuous-Discrete Unscented Kalman Filtering for Type 1 Diabetics' *IFAC Workshop Series*, vol 48, no. 20, pp. 159-164. DOI: 10.1016/j.ifacol.2015.10.132


Bigoni, D, Engsig-Karup, AP & Marzouk, YM 2015, 'Adaptive spectral tensor-strain decomposition for the construction of surrogate models' *SIAM Conference on Computational Science and Engineering (SIAM CSE 2015)*, Salt Lake City, Utah, United States, 04/03/2015 - 18/03/2015,


Schmidt, S, Boiroux, D, Ranjan, A, Jørgensen, JB, Madsen, H & Nørgaard, K 2015, 'An artificial pancreas for automated blood glucose control in patients with Type 1 diabetes' *Therapeutic Delivery*, vol 6, no. 5, pp. 211-221. DOI: 10.4155/tde.15.12


Engsig-Karup, AP, Bigoni, D & Eskilsson, C 2015, 'A Spectral Element Method for Nonlinear and Dispersive Water Waves' SIAM Conference on Computational Science and Engineering (SIAM CSE 2015), Salt Lake City, Utah, United States, 04/03/2015 - 18/03/2015,


Vandenberghhe, L & Andersen, MS 2015, 'Chordal Graphs and Semidefinite Optimization' Foundations and Trends in Optimization, vol 1, no. 4, pp. 241-433. DOI: 10.1561/2400000006


Pawlak, W, Glimberg, SL & Engsig-Karup, AP 2015, 'Computational Hydrodynamics: How Portable and Scalable Are Heterogeneous Programming Paradigms?' SIAM Conference on Computational Science and Engineering (SIAM CSE 2015), Salt Lake City, Utah, United States, 04/03/2015 - 18/03/2015,


Jørgensen, JS, Sidky, EY, Hansen, PC & Pan, X 2015, ‘Empirical average-case relation between undersampling and sparsity in X-ray CT’ Inverse Problems and Imaging, vol 9, no. 2, pp. 431-446. DOI: 10.3934/ipi.2015.9.431


Christensen, MLC, Villa, U & Vassilevski, P 2015, Multilevel techniques lead to accurate numerical upscaling and scalable robust solvers for reservoir simulation. in SPE Reservoir Simulation Symposium 2015. vol. 2, SPE-173257-MS, Society of Petroleum Engineers, pp. 1156-1167. DOI: 10.2118/173257-MS

Rose, S, Andersen, MS, Sidky, EY & Pan, X 2015, 'Noise properties of CT images reconstructed by use of constrained total-variation, data-discrepancy minimization' Medical Physics, vol 42, no. 5, pp. 2690-2698. DOI: 10.1118/1.4914148


Christiansen, LH 2015, 'Pairs of dual Gabor frames generated by functions of Hilbert-Schmidt type' Advances in Computational Mathematics, vol 41, no. 6, pp. 1101-1118. DOI: 10.1007/s10444-015-9402-7


Romanov, M, Dahl, AB, Dong, Y & Hansen, PC 2015, Relaxed Simultaneous Tomographic Reconstruction and Segmentation with Class Priors for Poisson Noise. Technical University of Denmark (DTU), Kgs. Lyngby. DTU Compute-Technical Report-2015, no. 6


Romanov, M, Dahl, AB, Dong, Y & Hansen, PC 2015, 'Simultaneous tomographic reconstruction and segmentation with class priors' Inverse Problems in Science and Engineering, vol 24, no. 8, pp. 1432-1453. DOI: 10.1080/17415977.2015.1124428


Engsig-Karup, AP, Eskilsson, C & Ricchiuto, M 2015, 'Spectral element modelling of floating bodies in a Boussinesq framework' 2nd Frontiers in Computational Physics Conference: Energy Sciences , Zurich, Switzerland, 03/06/2015 - 05/06/2015,

Zhang, L, Pedersen, M & Lin, Z 2015, 'Stability patterns for a size-structured population model and its stage-structured counterpart' Mathematical Biosciences, vol 267, pp. 109-123. DOI: 10.1016/j.mbs.2015.06.014


Rose, SD, Andersen, MS, Sidky, EY & Pan, X 2015, TV-constrained incremental algorithms for low-intensity CT image reconstruction, in Proceedings of the 2015 IEEE Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC). IEEE. DOI: 10.1109/NSSMIC.2015.7582108


Stidsen, TR, Andersen, KA & Dammann, B 2014, 'A Branch and Bound Algorithm for a Class of Biobjective Mixed Integer Programs' Management Science, vol 60, no. 4, pp. 1009-1032. DOI: 10.1287/mnsc.2013.1802


Petersen, LN, Poulsen, NK, Niemann, HH, Utzen, C & Jørgensen, JB 2014, Application of Constrained Linear MPC to a Spray Dryer. in Proceedings of the IEEE Conference on Control Applications (CCA), 2014 . IEEE, pp. 2120-2126. DOI: 10.1109/CCA.2014.6981616


Sun, Y, Andersen, MS & Vandenbergh, L 2014, 'Decomposition in conic optimization with partially separable structure' *SIAM Journal on Optimization*, vol 24, no. 2, pp. 873-897. DOI: 10.1137/130926924


Hoffmann, K & Knudsen, K 2014, 'Iterative Reconstruction Methods for Hybrid Inverse Problems in Impedance Tomography' *Sensing and Imaging*, vol 15, 96. DOI: 10.1007/s11220-014-0096-6


Carlsen, M, Koehl, P & Røgen, P 2014, 'On the importance of the distance measures used to train and test knowledge-based potentials for proteins' *P L o S One*, vol 9, no. 11. DOI: 10.1371/journal.pone.0109335


Karamedovic, M 2014, ‘Sparse data structures in 3DXRD’ Sparse Tomo Days, Kgs. Lyngby, Denmark, 26/05/2014 - 28/05/2014,

Bigoni, D, Engsig-Karup, AP & Marzouk, YM 2014, ‘Spectral Tensor-Train Decomposition for low-rank surrogate models’ Spatial Statistics and Uncertainty Quantification on Supercomputers, Bath, United Kingdom, 19/05/2014 - 21/05/2014,


Carlsen, M 2014, 'Using Operators to Expand the Block Matrices Forming the Hessian of a Molecular Potential' *Journal of Computational Chemistry*, vol 35, no. 15, pp. 1149-1158. DOI: 10.1002/jcc.23609


Frison, G & Jørgensen, JB 2013, A Fast Condensing Method for Solution of Linear-Quadratic Control Problems. in 52nd IEEE Conference on Decision and Control. IEEE, pp. 7715-7720. DOI: 10.1109/CDC.2013.6761114


Hansen, FY, Bruch, LW & Dammann, B 2013, 'Atomic scattering from an adsorbed monolayer solid with a helium beam that penetrates to the substrate' Journal of Chemical Physics, vol 138, no. 10, pp. 104705. DOI: 10.1063/1.4794742


Serensen, HHB 2013, 'Auto-tuning of level 1 and level 2 BLAS for GPUs' Concurrency and Computation: Practice & Experience, vol 25, no. 8, pp. 1183-1198. DOI: 10.1002/cpe.2916


Christiansen, LH & Christensen, O 2013, 'Construction of smooth compactly supported windows generating dual pairs of gabor frames' Asian-European Journal of Mathematics, vol 6, no. 1, 1350011. DOI: 10.1142/S1793557113500113


Glimberg, SL, Engsig-Karup, AP, Nielsen, AS & Dammann, B 2013, Development of software components for heterogeneous many-core architectures. in R Couturier (ed.), Designing Scientific Applications on GPUs. Taylor & Francis, pp. 73–104.


Ragen, P & Koehl, P 2013, 'Extracting knowledge from protein structure geometry' Proteins - Structure Function and Bioinformatics, vol 81, no. 5, pp. 841-851. DOI: 10.1002/prot.24242
Sidky, EY, Jørgensen, JH & Pan, X 2013, ‘First-order convex feasibility algorithms for x-ray CT’ Medical Physics, vol 40, no. 3, 031115. DOI: 10.1118/1.4790698


Hjorth, PG & Karamehmedovic, M 2013, 'Sizing of Microparticles from Angular Scattering Ratio' Paper presented at Foodtech Bazar, Roskilde, Denmark, 30/10/2013,


Engsig-Karup, AP, Bigoni, D & Glimberg, SL 2013, 'Stochastic Wave Dynamics and Uncertainty Quantification' 38th Woudschoten Conference, Zeist, Netherlands, 02/10/2013 - 04/10/2013,

Petersen, LN, Poulsen, NK, Niemann, HH, Utzen, C & Jørgensen, JB 2013, 'The Potential of Economic Model Predictive Control for Spray Drying Plants' 18th Nordic Process Control Workshop, Oulu, Finland, 22/08/2013 - 23/08/2013,


