

Center for Quantification of Imaging Data from MAX IV – Publication list 2017-2022

- Auenhammer, R.M., Jeppesen, N., Mikkelsen, L.P., Dahl, V.A. and Asp, L.E., 2022. X-ray computed tomography data structure tensor orientation mapping for finite element models—STXAE. *Software Impacts*, p.100216.
- Auenhammer, R.M., Jeppesen, N., Mikkelsen, L.P., Dahl, V.A., Blinzler, B.J. and Asp, L.E., 2022. Robust numerical analysis of fibrous composites from X-ray computed tomography image data enabling low resolutions. *Composites Science and Technology*, p.109458.
- Christensen, J., Jensen, P., Hannemose, M., Dahl, A. and Dahl, V., 2022, March. LayeredCNN: Segmenting Layers with Autoregressive Models. In *Proceedings of the Northern Lights Deep Learning Workshop (Vol. 3)*.
- Jensen, P.M., Jeppesen, N., Dahl, A.B. and Dahl, V.A., 2022. Review of Serial and Parallel Min-Cut/Max-Flow Algorithms for Computer Vision. *IEEE Transactions on Pattern Analysis & Machine Intelligence*, (01), pp.1-1.
- Johansson, S., Engqvist, J., Tryding, J. and Hall, S.A., 2022. Microscale deformation mechanisms in paperboard during continuous tensile loading and 4D synchrotron X-ray tomography. *Strain*, p.e12414.
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- Wu, D., Engqvist, J., Barbier, C., Karlsson, C. and Hall, S., 2022. Unravelling the deformation process of a compacted paper: in-situ tensile loading, 4D X-ray tomography and image-based analysis. *International Journal of Solids and Structures*, 242, p.111539.
- Andersen, S.B., Taghavi, I., Kjer, H.M., Sjøgaard, S.B., Gundlach, C., Dahl, V.A., Nielsen, M.B., Dahl, A.B., Jensen, J.A. and Sørensen, C.M., 2021. Evaluation of 2D super-resolution ultrasound imaging of the rat renal vasculature using ex vivo micro-computed tomography. *Scientific reports*, 11(1), pp.1-13.
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- Brenne, E.O., Dahl, V.A. and Jørgensen, P.S., 2021. A physical model for microstructural characterization and segmentation of 3D tomography data. *Materials Characterization*, 171, p.110796.
- Heingård, M., Musser, G., Hall, S.A. and Clarke, J.A., 2021. New remains of scandiavis Mikkelsenii inform avian phylogenetic relationships and brain evolution. *Diversity*, 13(12), p.651.
- Jeppesen, N., Jensen, P.M., Christensen, A.N., Dahl, A.B. and Dahl, V.A., 2021. Faster Multi-Object Segmentation using Parallel Quadratic Pseudo-Boolean Optimization. In *Proceedings of the IEEE/CVF International Conference on Computer Vision* (pp. 6260-6269).
- Jeppesen, N., Mikkelsen, L.P., Dahl, A.B., Christensen, A.N. and Dahl, V.A., 2021. Quantifying effects of manufacturing methods on fiber orientation in unidirectional composites using structure tensor analysis. *Composites Part A: Applied Science and Manufacturing*, 149, p.106541.
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- Koo, J., Dahl, A.B. and Dahl, V.A., 2021. DALM, Deformable Attenuation-Labeled Mesh for Tomographic Reconstruction and Segmentation. *IEEE Transactions on Computational Imaging*, 7, pp.151-163.
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- Rasmussen, P.W., Sørensen, H.O., Bruns, S., Dahl, A.B. and Christensen, A.N., 2021. Improved dynamic imaging of multiphase flow by constrained tomographic reconstruction. *Scientific reports*, 11(1), pp.1-14.

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Jeppesen, N., Christensen, A.N., Dahl, V.A. and Dahl, A.B., 2020. Sparse layered graphs for multi-object segmentation. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition* (pp. 12777-12785).

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