

## Center for Quantification of Imaging Data from MAX IV – Publication list 2017-2023

Johansson, S., Engqvist, J., Tryding, J. and Hall, S.A., 2023, Experimental investigation of microscale mechanisms during compressive loading of paperboard, *Cellulose*, accepted

Larsson, E., Gürsoy, D. and Hall, S.A., 2023. Kitchen-Based Light Tomography - a DIY toolkit for advancing tomography - by and for the tomography community. *Tomography of Materials and Structures*, 1, 100001

Lowes, M., Christensen, J., Hansen, B., Hannemose, M., Dahl, A., and Dahl, V. 2023. Interactive Scribble Segmentation. In *Proceedings of the Northern Lights Deep Learning Workshop*.

Mikkelsen, L., Fæster, S., and Dahl, V. 2023. Dataset for scanning electron microscopy based local fiber volume fraction analysis of non-crimp fabric glass fiber reinforced composites. *Composites Part A: Applied Science and Manufacturing*, p.107493.

Ørting, S. N., Stephensen, H. J. T., & Sporning, J. 2023. Morphology on categorical distributions. *Journal of Mathematical Imaging and Vision*, 1-13. Accepted

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.

Jensen, J., Schou, M., Andersen, S., Tomov, B., Søggaard, S., Sørensen, C., Nielsen, M., Gundlach, C., Kjer, H., Dahl, A., and others 2022. In Vivo Super Resolution Ultrasound Imaging using the Erythrocytes-SURE. *2022 IEEE International Ultrasonics Symposium (IUS)* (pp. 1–4).

Jensen, J., Schou, M., Andersen, S., Søggaard, S., Sørensen, C., Nielsen, M., Gundlach, C., Kjer, H., Dahl, A., Stuart, M., and others 2022. Fast super resolution ultrasound imaging using the erythrocytes. *Medical Imaging 2022: Ultrasonic Imaging and Tomography* (pp. 79–84).

Jensen, P., Wickramasinghe, U., Dahl, A., Fua, P., and Dahl, V. 2022. Deep Active Latent Surfaces for Medical Geometries. *arXiv preprint arXiv:2206.10241*.

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.

Kalbfleisch S., Zhang Y., Kahnt M., Buakor K., Langer M., Dreier T., Dierks H., Stjärneblad P., Larsson E., Gordeyeva K., Chayanun L., Söderberg D., Wallentin J., Bech M. and Villanueva-Perez

- P., 2022. X-ray in-line holography and holotomography at the NanoMAX beamline. *J. Synchrotron Radiation*. (2022). 29, 224-229
- Martell, J., Alwmark, C., Daly, L., Hall, S., Alwmark, S., Woracek, R., Hektor, J., Helfen, L., Tengattini, A. and Lee, M., 2022. The scale of a martian hydrothermal system explored using combined neutron and x-ray tomography. *Science Advances*, 8(19), p.eabn3044.
- Perens, J., Salinas, C., Roostalu, U., Skytte, J., Gundlach, C., Hecksher-Sørensen, J., Dahl, A., and Dyrby, T. 2022. Multimodal 3D mouse brain atlas framework with skull-derived coordinate system. (Accepted/In press) *Neuroinformatics*. 18 p.
- Pingel, J., Kjer, H., Biering-Sørensen, F., Feidenhans'l, R., and Dyrby, T. 2022. 3D synchrotron imaging of muscle tissues at different atrophic stages in stroke and spinal cord injury: a proof-of-concept study. *Scientific Reports*, 12(1), p.17289.
- Sporring, J. and Darkner, S., 2022. Reconstructing Binary Signals from Local Histograms. *Entropy*, 24(3), p.433
- Sporring, J., & Darkner, S., 2022. An algebra for local histograms. *Frontiers in Computer Science*, 4.
- Tichit, P., Zhou, T., Kjer, H.M., Dahl, V.A., Dahl, A.B. and Baird, E., 2022. InSegtCone: interactive segmentation of crystalline cones in compound eyes. *BMC zoology*, 7(1), pp.1-12.
- Törnquist, E., Le Cann, S., Tengattini, A., Helfen, L., Kok, J., Hall, S.A. and Isaksson, H., 2022. The hydration state of bone tissue affects contrast in neutron tomographic images. *Frontiers in Bioengineering and Biotechnology (Biomechanics)*, 10, 911866
- Wang, C., Ostergaard, L., Hasselholt, S., & Sparring, J., 2022. Extracting Mitochondrial Cristae Characteristics from 3D Focused Ion Beam Scanning Electron Microscopy Data. *bioRxiv*, 2022-11.
- 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.
- Baud, P., Hall, S., Heap, M.J., Ji, Y. and Wong, T.F., 2021. The Brittle-Ductile Transition in Porous Limestone: Failure Mode, Constitutive Modeling of Inelastic Deformation and Strain Localization. *Journal of Geophysical Research: Solid Earth*, 126(5), p.e2020JB021602.
- 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.

Johansson, S., Engqvist, J., Tryding, J. and Hall, S.A., 2021. 3D Strain Field Evolution and Failure Mechanisms in Anisotropic Paperboard. *Experimental Mechanics*, 61(3), pp.581-608.

Koo, J., Brenne, E.O., Dahl, A.B. and Dahl, V.A., 2021, April. A Tomographic Reconstruction Method using Coordinate-based Neural Network with Spatial Regularization. In *Proceedings of the Northern Lights Deep Learning Workshop (Vol. 2)*.

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.

Koo, J., Dahl, A.B., Bærentzen, J.A., Chen, Q., Bals, S. and Dahl, V.A., 2021. Shape from projections via differentiable forward projector for computed tomography. *Ultramicroscopy*, 224, p.113239.

Laprade, W.M., Perslev, M. and Sporning, J., 2021. How few annotations are needed for segmentation using a multi-planar U-Net?. In *Deep Generative Models, and Data Augmentation, Labelling, and Imperfections* (pp. 209-216). Springer, Cham.

Perens, J., Salinas, C.G., Skytte, J.L., Roostalu, U., Dahl, A.B., Dyrby, T.B., Wichern, F., Barkholt, P., Vrang, N., Jelsing, J. and Hecksher-Sørensen, J., 2021. An optimized mouse brain atlas for automated mapping and quantification of neuronal activity using iDISCO+ and light sheet fluorescence microscopy. *Neuroinformatics*, 19(3), pp.433-446.

Perens, J., Skytte, J.L., Salinas, C.G., Hecksher-Sørensen, J., Dyrby, T.B. and Dahl, A.B., 2021, April. Comparative Study Of Voxel-Based Statistical Analysis Methods For Fluorescently Labelled And Light Sheet Imaged Whole-Brain Samples. In *2021 IEEE 18th International Symposium on Biomedical Imaging (ISBI)* (pp. 1433-1437). IEEE.

Peter Winkel Rasmussen, Anders Bjorholm Dahl, Henning Osholm Sørensen, Anders Nymark Christensen, 2021. In *DHRTC Technology Conference 2021: Oil and Gas R&D towards 2050—supporting the energy transition*

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.

Reichardt, M., Jensen, P.M., Dahl, V.A., Dahl, A.B., Ackermann, M., Shah, H., Länger, F., Werlein, C., Kuehnel, M.P., Jonigk, D. and Salditt, T., 2021. 3D virtual histopathology of cardiac tissue from Covid-19 patients based on phase-contrast X-ray tomography. *Elife*, 10, p.e71359.

Stenqvist, T., Hektor, J., Bylund, S., Moberg, R., Edwards, M.O., Hall, S.A. and Näslund, L.Å., 2021. 3D X-Ray Diffraction Characterization of Grain Growth and Recrystallization in Rolled Braze Clad Aluminum Sheet. *Advanced Engineering Materials*, 23(11), p.2100126.

Stephensen, H.J., Svane, A.M., Villanueva, C.B., Goldman, S.A. and Sporning, J., 2021. Measuring shape relations using r-parallel sets. *Journal of Mathematical Imaging and Vision*, 63(8), pp.1069-1083.

- Sørensen, H.O., Rasmussen, P.W., Dahl, A.B. and Christensen, A., 2021. Tri-axial flow cell for dynamic CT. In *DHRTC Technology Conference 2021: Oil and Gas R&D towards 2050—supporting the energy transition*.
- Townsend, P., Larsson, E., Karlson, T., Hall, S.A., Lundman, M., Bergström, P., Hanson, C., Lorén, N., Gebäck, T., Särkkä, A. and Röding, M., 2021. Stochastic modelling of 3D fiber structures imaged with X-ray microtomography. *Computational Materials Science*, 194, p.110433.
- Törnquist, E., Le Cann, S., Tudisco, E., Tengattini, A., Andò, E., Lenoir, N., Hektor, J., Raina, D.B., Tägil, M., Hall, S.A. and Isaksson, H., 2021. Dual modality neutron and x-ray tomography for enhanced image analysis of the bone-metal interface. *Physics in Medicine & Biology*, 66(13), p.135016.
- Wang, Y., Emerson, M.J., Conradsen, K., Dahl, A.B., Dahl, V.A., Maire, E. and Withers, P.J., 2021. Evolution of fibre deflection leading to kink-band formation in unidirectional glass fibre/epoxy composite under axial compression. *Composites Science and Technology*, 213, p.108929.
- Andersson, M., Kjer, H.M., Rafael-Patino, J., Pacureanu, A., Pakkenberg, B., Thiran, J.P., Ptito, M., Bech, M., Dahl, A.B., Dahl, V.A. and Dyrby, T.B., 2020. Axon morphology is modulated by the local environment and impacts the noninvasive investigation of its structure–function relationship. *Proceedings of the National Academy of Sciences*, 117(52), pp.33649-33659.
- Cattaneo, C., Liu, J., Wang, C., Pagliarini, E., Sporning, J. and Bredie, W.L., 2020. Comparison of manual and machine learning image processing approaches to determine fungiform papillae on the tongue. *Scientific Reports*, 10(1), pp.1-15.
- Dahl, V.A., Emerson, M.J., Trinderup, C.H. and Dahl, A.B., 2020. Content-based propagation of user markings for interactive segmentation of patterned images. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops* (pp. 994-995).
- Dahlin, L.B., Rix, K.R., Dahl, V.A., Dahl, A.B., Jensen, J.N., Cloetens, P., Pacureanu, A., Mohseni, S., Thomsen, N.O. and Bech, M., 2020. Three-dimensional architecture of human diabetic peripheral nerves revealed by X-ray phase contrast holographic nanotomography. *Scientific reports*, 10(1), pp.1-8.
- Jensen, P.M., Dahl, A.B. and Dahl, V.A., 2020. Multi-object Graph-based Segmentation with Non-overlapping Surfaces. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops* (pp. 976-977).
- 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).
- Jeppesen, N., Dahl, V.A., Christensen, A.N., Dahl, A.B. and Mikkelsen, L.P., 2020, October. Characterization of the fiber orientations in non-crimp glass fiber reinforced composites using structure tensor. In *IOP Conference Series: Materials Science and Engineering (Vol. 942, No. 1, p. 012037)*. IOP Publishing.
- Kjer, H.M., Andersson, M., He, Y., Elkjaer, M.L., Pacureanu, A., Illes, Z., Pakkenberg, B., Dahl, A.B., Dahl, V.A. and Dyrby, T.B., 2020. Streamline tractography for 3D mapping of axon bundle organization in one MRI voxel using ultra-high resolution synchrotron radiation imaging. In *2020 ISMRM & SMRT Virtual Conference & Exhibition* (pp. 1-3). The International Society for Magnetic Resonance in Medicine.

- Lindhøj, M.B., Henriksen, T., Pedersen, L. and Sporning, J., 2019, July. Using a high-level parallel programming language for GPU-accelerated tomographic reconstruction. In *2019 International Conference on High Performance Computing & Simulation (HPCS)* (pp. 27-32). IEEE.
- Andersson, M., Rafael-Patino, J., Kjer, H.M., Dahl, V.A., Pacureanu, A., Bech, M., Dahl, A.B., Thiran, J.P. and Dyrby, T.B., 2020. The impact of axon orientation dispersion and 3D diameter variations on the transverse apparent diffusion coefficient. In *2020 ISMRM & SMRT Virtual Conference & Exhibition* (pp. 1-3). The International Society for Magnetic Resonance in Medicine.
- Nyboe Ørting, S., Teglbjærg Stephensen, H.J. and Sporning, J., 2020. Morphology on categorical distributions. *arXiv e-prints*, pp.arXiv-2012.
- Wang, C., Cattaneo, C., Liu, J., Bredie, W., Pagliarini, E. and Sporning, J., 2020, October. A Novel Approach to Tongue Standardization and Feature Extraction. In *International Conference on Medical Image Computing and Computer-Assisted Intervention* (pp. 36-45). Springer, Cham.
- Wang, C., Cattaneo, C., Liu, J., Bredie, W., Pagliarini, E. and Sporning, J., 2020, October. A Novel Approach to Tongue Standardization and Feature Extraction. In *International Conference on Medical Image Computing and Computer-Assisted Intervention* (pp. 36-45). Springer, Cham.
- Ørting, S.N., Stephensen, H.J.T. and Sporning, J., 2020. Morphology on categorical distributions. *arXiv preprint arXiv:2012.07315*.
- Borg, L., Sporning, J., Dam, E.B., Dahl, V.A., Dyrby, T.B., Feidenhans, R., Dahl, A.B. and Pingel, J., 2019. Muscle fibre morphology and microarchitecture in cerebral palsy patients obtained by 3D synchrotron X-ray computed tomography. *Computers in Biology and Medicine*, 107, pp.265-269.
- Dahl, V.A. and Dahl, A.B., 2019, June. Global Similarity with Additive Smoothness for Spectral Segmentation. In *International Conference on Scale Space and Variational Methods in Computer Vision* (pp. 357-368). Springer, Cham.
- Emerson, M.J., Dahl, A.B., Conradsen, K. and Dahl, V.A., 2019, January. Insegt fibre: A user-friendly software for individual fibre segmentation. In *22nd International Conference On Composite Materials (ICCM22)*. Melbourne, Australia.
- Emerson, M.J., Jespersen, K.M., Wang, Y., Withers, P.J., Dahl, V.A., Conradsen, K., Mikkelsen, L.P. and Dahl, A.B., 2019. Insegt fibre: A powerful segmentation tool for quantifying fibre architecture in composites. In *Int. Conf. Tomography of Materials & Structures*. Cairns, Australia.
- Hempel, C., Sporning, J. and Kurtzhals, J.A.L., 2019. Experimental cerebral malaria is associated with profound loss of both glycan and protein components of the endothelial glycocalyx. *The FASEB Journal*, 33(2), pp.2058-2071.
- Jensen, P.M., Trinderup, C.H., Dahl, A.B. and Dahl, V.A., 2019, June. Zonohedral approximation of spherical structuring element for volumetric morphology. In *Scandinavian Conference on Image Analysis* (pp. 128-139). Springer, Cham.
- Nguyen, T.T., Dahl, V.A., Bærentzen, J.A. and Dahl, A.B., 2019, September. Deformable Mesh Evolved by Similarity of Image Patches. In *2019 IEEE International Conference on Image Processing (ICIP)* (pp. 2731-2735). IEEE.
- Saxena, P., Bissacco, G., Gundlach, C., Dahl, V.A., Trinderup, C.H. and Dahl, A.B., 2019. Process characterization for molding of paper bottles using computed tomography and structure tensor analysis. In *9th Conference on industrial computed tomography*.

Dahl, V.A., Dahl, A.B., Trinderup, C.H. and Gundlach, C., 2018, August. Layered Surface Detection for Virtual Unrolling. In *2018 24th International Conference on Pattern Recognition (ICPR)* (pp. 3074-3080). IEEE.

Dahl, V.A., Koo, J., Hansen, P.C. and Dahl, A.B., 2018. Deformable Curves for Outlining Objects Directly From Projections. In *69th Annual Conference of the Nordic Microscopy Society*.

Emerson, M.J., Dahl, A.B., Dahl, V.A., Conradsen, K., Wang, Y., Withers, P.J., Jespersen, K.M. and Mikkelsen, L.P., 2018. Understanding UD Fibre-reinforced Polymers through X-ray Imaging and Individual Fibre Tracking. In *69th Annual Conference of the Nordic Microscopy Society*.

Emerson, M.J., Dahl, V.A., Conradsen, K., Mikkelsen, L.P. and Dahl, A.B., 2018. A multimodal data-set of a unidirectional glass fibre reinforced polymer composite. *Data in brief*, *18*, pp.1388-1393.

Emerson, M.J., Dahl, V.A., Conradsen, K., Mikkelsen, L.P. and Dahl, A.B., 2018. Statistical validation of individual fibre segmentation from tomograms and microscopy. *Composites Science and Technology*, *160*, pp.208-215.

Emerson, M.J., Wang, Y., Withers, P.J., Conradsen, K., Dahl, A.B. and Dahl, V.A., 2018. Quantifying fibre reorientation during axial compression of a composite through time-lapse X-ray imaging and individual fibre tracking. *Composites Science and Technology*, *168*, pp.47-54.

Fedrico, A., Marstal, K., Bender Koch, C., Andersen Dahl, V., BJORHOLM Dahl, A., Lyksborg, M., Gundlach, C., Ott, F. and Strobl, M., 2018. Investigation of a Monturaqui Impactite by means of bi-modal X-ray and neutron tomography. *Journal of Imaging*, *4*(5), p.72.

Kehl, C., Mustafa, W., Kehres, J., Dahl, A.B. and Olsen, U.L., 2018. Multi-Spectral Imaging via Computed Tomography (MUSIC)-Comparing Unsupervised Spectral Segmentations for Material Differentiation. *arXiv preprint arXiv:1810.11823*.

Sales, M., Strobl, M., Shinohara, T., Tremsin, A., Kuhn, L.T., Lionheart, W.R., Desai, N.M., Dahl, A.B. and Schmidt, S., 2018. *Three dimensional polarimetric neutron tomography of magnetic fields*. *Scientific reports*, *8*(1), pp.1-6.

Sporring, J., 2018. Estimating the Continuous Entropy of a Discrete Set of Orientations in  $\mathbb{R}^3$ . *Department of Computer Science, University of Copenhagen*.

Borg, L., Jørgensen, J.S., Frikel, J. and Sparring, J., 2017. Reduction of variable-truncation artifacts from beam occlusion during in situ x-ray tomography. *Measurement Science and Technology*, *28*(12), p.124004.

Borg, L., Jørgensen, J.S., Frikel, J., Quinto, E.T. and Sparring, J., 2017. Reducing artifacts from varying projection truncations. In *3rd International Conference on Tomography of 3D Materials and Structures*.

Borg, L., Sparring, J. and Jørgensen, J.S., 2017. *Towards characterizing and reducing artifacts caused by varying projection truncation*. Department of Computer Science, University of Copenhagen.

Dahl, V.A. and Dahl, A.B., 2017, June. A probabilistic framework for curve evolution. In *International Conference on Scale Space and Variational Methods in Computer Vision* (pp. 421-432). Springer, Cham.

Dahl, V.A., Dahl, A.B. and Hansen, P.C., 2017. Computing segmentations directly from x-ray projection data via parametric deformable curves. *Measurement Science and Technology*, 29(1), p.014003.

Einarsson, G., Jensen, J.N., Paulsen, R.R., Einarsdottir, H., Ersbøll, B.K., Dahl, A.B. and Christensen, L.B., 2017, June. Foreign object detection in multispectral x-ray images of food items using sparse discriminant analysis. In *Scandinavian Conference on Image Analysis* (pp. 350-361). Springer, Cham.

Emerson, M.J., Dahl, A.B., Dahl, V.A., Conradsen, K. and Mikkelsen, L.P., 2017. New approach for validating the segmentation of 3D data applied to individual fibre extraction. In *3rd International Conference on Tomography of 3D Materials and Structures*.

Emerson, M.J., Dahl, V.A., Mikkelsen, L.P., Dahl, A.B. and Conradsen, K., 2017. Geometrical Characterisation of Individual Fibres From X-Ray Tomograms. In *30th Nordic Seminar on Computational Mechanics (NSCM-30)* (p. 59).

Emerson, M.J., Jespersen, K.M., Dahl, A.B., Conradsen, K. and Mikkelsen, L.P., 2017. Individual fibre segmentation from 3D X-ray computed tomography for characterising the fibre orientation in unidirectional composite materials. *Composites Part A: Applied Science and Manufacturing*, 97, pp.83-92.

Emerson, M.J., Wang, Y., Jespersen, K.M., Mikkelsen, L.P., Withers, P.J., Conradsen, K., Dahl, V.A. and Dahl, A.B., 2017. Unidirectional Fibre Composite Characterisation from X-ray Tomography. In *TMS 2017: 146th Annual Meeting and Exhibition*.

Kheirabadi, M., Mustafa, W., Lyksborg, M., Olsen, U.L. and Dahl, A.B., 2017, October. Multispectral x-ray CT: multivariate statistical analysis for efficient reconstruction. In *Developments in X-Ray Tomography XI* (Vol. 10391, p. 1039113). International Society for Optics and Photonics.

Mukherjee, K., Fæster, S., Hansen, N., Dahl, A.B., Gundlach, C., Frandsen, J.O. and Sturlason, A., 2017. Graphite nodules in fatigue-tested cast iron characterized in 2D and 3D. *Materials Characterization*, 129, pp.169-178.

Neldam, C.A., Sporning, J., Rack, A., Lauridsen, T., Hauge, E.M., Jørgensen, H.L., Jørgensen, N.R., Feidenhansl, R. and Pinholt, E.M., 2017. Synchrotron radiation  $\mu$ CT and histology evaluation of bone-to-implant contact. *Journal of Cranio-Maxillofacial Surgery*, 45(9), pp.1448-1457.

Sun, J., Zhang, Y.B., Dahl, A.B., Conradsen, K. and JUUL JENSEN, D., 2017. A method to characterize the roughness of 2-D line features: recrystallization boundaries. *Journal of Microscopy*, 265(3), pp.313-321.