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TEN MOST IMPORTANT PUBLICATIONS RELATED TO THE APPLICATION

A Peer reviewed scientific articles

A1 Journal Article (refereed), original research

1. Inkinen SI, Kotiaho AO, Hanni M, **Nieminen MT**, Brix MAK Computed Tomography Artefact Detection Using Deep Learning—Towards Automated Quality Assurance. Computed Tomography Artefact Detection Using Deep Learning—Towards Automated Quality Assurance. In: Särestöniemi, M., et al. Digital Health and Wireless Solutions (NCDHWS 2024). Communications in Computer and Information Science 2084:17-28, 2024.
2. Nykänen O, Isosalo A, Inkinen S, Casula V, Nevalainen M, Lattanzi R, Cloos M, Nissi MJ, **Nieminen MT**. Deep-Learning-based Contrast Synthesis from MRF Parameter Maps in the Knee Joint: A Preliminary Study. Journal of Magnetic Resonance Imaging 58:559-568, 2023,
3. Inkinen SI, Juntunen MAK, Ketola J, Korhonen K, Sepponen P, Kotiaho A, Pohjanen VM, **Nieminen MT**. Virtual monochromatic imaging reduces beam hardening artefacts in cardiac interior photon counting computed tomography: a phantom study with cadaveric specimens. Biomedical Physics & Engineering Express 8, 2021.
4. Ketola JHJ, Heino H, Juntunen MAK, **Nieminen MT**, Siltanen S, Inkinen SI. Generative adversarial networks improve interior computed tomography angiography reconstruction. Biomedical Physics & Engineering Express 7, 2021.
5. Juntunen MAK, Kotiaho AO, **Nieminen MT**, Inkinen SI. Optimizing iterative reconstruction for quantification of calcium hydroxyapatite with photon counting flat-detector computed tomography: a cardiac phantom study. Journal of Medical Imaging, 8:052102, 2021.
6. Inkinen SI, Juntunen MAK, Kotiaho A, **Nieminen MT**. Calibration method and photon flux influences tiled flat-panel photon counting detector image uniformity in computed tomography. Journal of Instrumentation, 2020.
7. Juntunen MAK, Sepponen P, Korhonen K, Pohjanen V-M, Ketola J, Kotiaho A, **Nieminen MT**, Inkinen S. Interior photon counting computed tomography for quantification of coronary artery calcium: pre-clinical phantom study. Biomed Phys Eng Express,6:055011, 2020.

8. Juntunen MAK, Inkinen SI, Ketola JH, Kotiaho A, Kauppinen M, Winkler A, **Nieminen MT**. Framework for Photon Counting Quantitative Material Decomposition. IEEE Transactions on Medical Imaging, 39:35-47, 2020.
9. Purisha Z, Karhula SS, Ketola JH, Rimpeläinen J, **Nieminen MT**, Saarakkala S, Kröger H, Siltanen S. An automatic regularization method: An application for 3D X-ray micro-CT reconstruction using sparse data. IEEE Transactions on Medical Imaging, 38:417-425, 2019.
10. Ketola JH, Karhula SS, Finnilä MAJ, Korhonen RK, Herzog W, Siltanen S, **Nieminen MT**, Saarakkala S. Iterative and discrete reconstruction in the evaluation of the rabbit model of osteoarthritis. Nature Scientific Reports, 8:12051, 2018.