

The 10 most important publications, Marko Vauhkonen, 26.8.2024

1. P.J. Vauhkonen, M. Vauhkonen, T. Savolainen, and J.P. Kaipio, Three-dimensional electrical impedance tomography based on the complete electrode model, *IEEE Trans Biomed Eng*, vol. 46, pp. 1150 -1160, 1999.
2. M. Vauhkonen, W.R.B. Lionheart, L.M. Heikkinen, P.J. Vauhkonen, and J.P. Kaipio, A MATLAB package for the EIDORS project to reconstruct two-dimensional EIT images, *Physiol Meas*, vol. 22, pp. 107 -111, 2001.
3. T. Tarvainen, M. Vauhkonen, V. Kolehmainen, and J.P. Kaipio, Hybrid radiative - transfer -diffusion model for optical tomography, *Appl Opt*, vol. 44, no. 6, pp. 876 -886, 2005.
4. E. Boman, J. Tervo and M. Vauhkonen, Modelling the transport of ionizing radiation using the finite element method, *Phys Med Biol*, vol. 50, pp. 265-280, 2005.
5. M. Vauhkonen, M. Hamsch and H.C. Igney, A measurement system and image reconstruction in magnetic induction tomography, *Physiol Meas*, vol. 29, pp. S445-S454, 2008.
6. V. Rimpiläinen, L.M. Heikkinen, M. Vauhkonen, Moisture distribution and hydrodynamics of wet granules during fluidized-bed drying characterized with volumetric electrical capacitance tomography, *Chem. Eng. Sci.*, vol. 75, pp. 220-234, 2012.
7. O. Lehtikangas, K. Karhunen and M. Vauhkonen, Reconstruction of velocity fields in electromagnetic flow tomography, *Philosophical Transactions Royal Society A*. 374:20150334. <http://dx.doi.org/10.1098/rsta.2015.0334>, 2016.
8. M. Hosseini, A. Kaasinen, G. Link, M. Aliyari Shoorehdeli, T. Lähivaara, and M. Vauhkonen, Tomography-assisted control for the microwave drying process of polymer foams, *J. Process Control* 109, 082015, 2022.
9. M. Ziaul Arif, A. Seppänen and M. Vauhkonen, State estimation approach to dual-modal imaging of two-phase flow based on electromagnetic flow tomography and electrical tomography, *Inverse Problems*, vol. 39, 084003, DOI 10.1088/1361-6420/acdcef, 2023.
10. M. Ziaul Arif, T. Lähivaara and M. Vauhkonen, Deep learning-assisted dual-modal tomography for phase flow rate estimation in two-phase oil-water flow systems, *Meas. Sci. Technol.*, vol 35, p. 075302, DOI 10.1088/1361-6501/ad3a0a, 2024.