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List of Publications

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Articles in refereed scientific journals

1. Hänninen N, Pulkkinen A, Arridge S, Tarvainen T, Estimating absorption and scattering in quantitative photoacoustic tomography with an adaptive Monte Carlo method for light transport, *Inverse Problems and Imaging*, Accepted for publication.
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5. Manninen A, Mozumder M, Tarvainen T, Hauptmann A, Sparsity promoting reconstructions via hierarchical prior models in diffuse optical tomography, *Inverse Problems and Imaging*, 18(1):113-137, 2024.
6. Koponen E, Leskinen J, Tarvainen T, Pulkkinen A, Background-oriented schlieren sensitivity in terms of geometrical parameters of measurement setup, *The Journal of the Acoustical Society of America*, 154(6): 3726-3736, 2023.
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1. Sahlström T, Tarvainen T, Deep learning in photoacoustic tomography utilizing variational autoencoders, in *Proc. SPIE 12631, Opto-Acoustic Methods and Applications in Biophotonics VI*, C. Kim, J. Laufer, V. Ntziachristos, and R.J. Zemp Eds., 1263108, 2023.
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Book chapters

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1. Time-domain diffuse optical tomography system based on nanosecond scale pulse illuminations, UEF Dnro 1330/02.08.02.01/2021, 27.8.2021.
2. MATLAB-toolbox for simulating light transport using Monte Carlo method, UEF Dnro 323.02.07.03.01.18, 26.2.2018.
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Software

1. ValoMC - A Monte Carlo software for simulating light transport <https://inverselight.github.io/ValoMC/>