

## TEN MOST RELEVANT PUBLICATIONS

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#### A. Peer-reviewed scientific articles

##### A1. Journal articles

- [1] A. Hannukainen, J. Malinen and A. Ojalampi, Distributed solution of Laplacian eigenvalue problems, *SIAM Journal on numerical analysis* 60(1). p. 76-103, 2022
- [2] S. Armstrong, A. Hannukainen, T. Kuusi and J-C. Mourrat, An iterative method for elliptic problems with rapidly oscillating coefficients, *ESAIM: Mathematical Modelling and Numerical Analysis* 55(1), p. 37-55, 2021
- [3] A. Hannukainen, J-C Mourrat and H. Stoppels, Computing homogenized coefficients via multiscale representation and hierarchical hybrid grids, *ESAIM: M2AN*, 55, p.149-185, 2021
- [4] T. Häkkinen, S. Sova, I. Corfe , L. Tjäderhane , A. Hannukainen and J. Jernvall, Modeling enamel matrix secretion in mammalian teeth, *PLoS Computational Biology*, 15(5), 2019
- [5] A. Hannukainen, J. Malinen and A. Ojalampi, Efficient Solution of Symmetric Eigenvalue Problems from Families of Coupled Systems, *SIAM Journal on Numerical Analysis*, 57(4), 1789–1814, 2019
- [6] V. Candiani, A. Hannukainen and N. Hyvönen, Computational Framework for Applying Electrical Impedance Tomography to Head Imaging, *SIAM Journal on Scientific Computing*, 41(5), B1034–B1060, 2019
- [7] A. Huhtala, S. Bossuyt, A. Hannukainen, A priori error estimate of the finite element solution to a Poisson inverse source problem, *Inverse Problems*, 30(8), 2014
- [8] A. Hannukainen, Field of values analysis of a two-level preconditioner for the Helmholtz equation, *SIAM Journal on Numerical Analysis*, 51(3), 1567-1584, 2013
- [9] A. Hannukainen, S. Korotov, M. Křížek, The maximum angle condition is not necessary for convergence of the finite element method, *Numerische Mathematik*, 120(1),79–88, 2012
- [10] A. Hannukainen, M. Huber, J. Schöberl. A mixed hybrid finite element method for the Helmholtz equation, *Journal of Modern Optics*, 58(5-6), 424–437, 2010