

## Ten most significant publications

Tuomo Rossi

1. J. Rabinä, S. Mönkölä, T. Rossi, J. Markkanen, M. Gritsevich and K. Muinonen, "Controlled time integration for the numerical simulation of meteor radar reflections", *Journal of Quantitative Spectroscopy & Radiative Transfer*, 2016, to appear.
2. J. Rabinä, S. Mönkölä and T. Rossi, "Efficient time integration of Maxwell's equations by generalized finite-differences", *SIAM Journal on Scientific Computing*, **37**, B834–B854, 2015.
3. J. Rabinä, S. Mönkölä, T. Rossi, A. Penttilä and K. Muinonen, "Comparison of discrete exterior calculus and discrete-dipole approximation for electromagnetic scattering", *Journal of Quantitative Spectroscopy and Radiative Transfer*, **146**, 417–423, 2014.
4. D. Pauly and T. Rossi, "Theoretical considerations on the computation of generalized time-periodic waves", *Advances in Mathematical Sciences and Applications*, **21**, 105–131, 2011.
5. D. Pauly, S. Repin and T. Rossi, "Estimates for deviations from exact solutions of the Cauchy problem for Maxwell's equations", *Annales Academiae Scientiarum Fennicae*, **36**, 661–676, 2011.
6. S. Kähkönen, R. Glowinski, T. Rossi and R. Mäkinen, "Solution of time-periodic wave equation using mixed finite-elements and controllability techniques", *Journal of Computational Acoustics*, **19**, 335–352, 2011.
7. S. Mönkölä, E. Heikkola, A. Pennanen and T. Rossi, "Time-harmonic elasticity with controllability and higher order discretization methods", *Journal of Computational Physics*, **227**, 5513–5534, 2008.
8. E. Heikkola, S. Mönkölä, A. Pennanen, T. Rossi, "Controllability method for the Helmholtz equation with higher order discretizations", *Journal of Computational Physics*, **225/2**, 1553–1576, 2007.
9. E. Heikkola, S. Mönkölä, A. Pennanen, T. Rossi, "Controllability method for acoustic scattering with spectral elements", *Journal of Computational and Applied Mathematics*, **204/2**, 344–355, 2007.
10. R. Glowinski, T. Rossi, "A mixed formulation and exact controllability approach for the computation of the periodic solutions of the scalar wave equation. (I): Controllability problem formulation and related iterative solution", *Comptes Rendus Mathématique. Academie des Sciences. Paris*, **343/7**, 493–498, 2006.