

121. **R. Freund and R.H.W. Hoppe**; Stoer/Bulirsch: Numerische Mathematik I. 10., neu bearbeitete Auflage. Springer, Berlin-Heidelberg-New York, 2007

122. **C.-D. Nguyen and R.H.W. Hoppe**; Amorphous surface growth via a level set approach. *Nonlinear Analysis, Theory & Applications*, 66, 704–722, 2007

123. **H. Antil, R.H.W. Hoppe, and C. Linsennann**; Path-following primal-dual interior-point methods for shape optimization of stationary flow problems. *J. Numer. Math.*, 11, 81–100, 2007

124. **R.H.W. Hoppe and S.I. Petrova**; Elasto-plasticity model in structural optimization of composite materials with periodic microstructures. *Mathematics and Computers in Simulation* 74, 468–480, 2007

125. **R.H.W. Hoppe and S.I. Petrova**; Mechanical failure in microstructural heterogeneous materials. In: **NMA 2006** (T. Boyanov et al.; eds.), **Lecture Notes in Computer Science**, Vol. 4310, pp. 533–541, Springer, Berlin-Heidelberg-New York, 2007
126. **R.H.W. Hoppe and S.I. Petrova**; Adaptive refinement techniques in homogenization design method. In: **Free and Moving Boundaries: Analysis, Simulation and Control** (R. Glowinski, J.-P. Zolesio; eds.), **Lecture Notes in Pure and Applied Mathematics Vol. 252**, Taylor & Francis, London-New York-Singapore, 2007
127. **R.H.W. Hoppe, P. Porta, and Y. Vassilevski**; Computational issues related to iterative coupling of subsurface and channel flows. **CALCOLO** 44, 1–20, 2007
128. **W.G. Litvinov, T. Rahman, and R.H.W. Hoppe**; Model of an electro-rheological shock absorber and coupled problem for partial and ordinary differential equations with variable unknown domain. **Euro. Jnl. of Applied Mathematics**, 8, 1–24, 2007

129. D. Braess, C. Carstensen, and R.H.W. Hoppe; Convergence analysis of a conforming finite element method for an obstacle problem. *Numer. Math.* **107**, 455-471, 2007

130. A. Gantner, R.H.W. Hoppe, D. Köster, K.G. Siebert, and A. Wixforth; Numerical simulation of piezoelectrically agitated surface acoustic waves on microfluidic biochips. *Comp. Visual. Sci.* **10**, 145-161, 2007

131. F. Foss, R. Glowinski, and R.H.W. Hoppe; On the numerical solution of a semilinear elliptic eigenproblem of Lane-Emden type, (I): Problem formulation and description of the algorithms. *J. Numer. Math.* **15**, 181–208, 2007

132. F. Foss, R. Glowinski, and R.H.W. Hoppe; On the numerical solution of a semilinear elliptic eigenproblem of Lane-Emden type, (II): Numerical experiments. *J. Numer. Math.* **15**, 277–298, 2007

133. R.H.W. Hoppe and C. Carstensen; Convergence analysis of adaptive mixed and nonconforming finite element methods. **Proc. Fourth Int. Workshop on Scientific Computing and Applications**, June 20-23, 2005, Shanghai, China (B. Guo and Z.-S. Shi; eds.), pp. 38–49, Science Press, Beijing, 2007

134. A. Gaevskaya, R.H.W. Hoppe, and S. Repin; Functional approach to a posteriori error estimation for elliptic optimal control problems with distributed control. **Journal of Math. Sciences** 144, 4535–4547, 2007