

## List of Publications

- [1] Stephen D. Gedney, Regina Hanneman, Jens Hannemann, and Gang Liu. A fast integral equation solution technique for printed circuits in layered media. In *International IEEE Symposium on Antennas and Propagation, Columbus, OH, June 2003*, 2003.
- [2] Karl-Jörg Langenberg, Regina Hannemann, Klaus Mayer, Alexander Zimmer, and René Marklein. Implementierung eines SAFT-Algorithmus für inhomogen-anisotrope Materialien zur quantitativen Ultraschallprüfung austenitischer Materialien. In *Berichtsband zur Jahrestagung der DGZfP*, 2003.
- [3] René Marklein, Klaus Mayer, Regina Hannemann, Thomas Krylow, Kanaan Balasubramanian, Karl-Jörg Langenberg, and Volker Schmitz. Linear and nonlinear inversion algorithms applied in nondestructive evaluation. *Inverse Problems*, (18):1733 – 1759, 2002.
- [4] Regina Hannemann. *Modeling and Imaging of Elastodynamic Wave Fields in Inhomogeneous Anisotropic Media — An Object-Oriented Approach*. PhD thesis, University of Kassel, 2001.
- [5] Jens Hannemann, Regina Hannemann, Michael Zellerhoff, and Ludger Klinkenbusch. Scientific programming in field theory, part II. *Computing in Science and Engineering*, 3(4):78 – 85, July/August 2001.
- [6] Regina Hannemann, Jens Hannemann, Michael Zellerhoff, and Ludger Klinkenbusch. Scientific programming in field theory, part I. *Computing in Science and Engineering*, 3(3):66 – 74, May/June 2001.
- [7] Jens Hannemann, Regina Hannemann, and Michael Zellerhoff. Theoretical Electrical Engineering Toolkit (TETlib), URL: <http://www.hannemann-family.net/TETlib/> , 2004.
- [8] Karl-Jörg Langenberg, Regina Hannemann, Torsten Kaczorowski, René Marklein, Bernd Köhler, Christoph Schurig, and Friedhelm Walte. Application of modeling techniques for ultrasonic austenitic weld inspection. *NDT&E international*, 33:465 – 480, 2000.
- [9] Regina Hannemann, René Marklein, Karl-Jörg Langenberg, Bernd Köhler, Christoph Schurig, and Friedhelm Walte. Ultrasonic wave propagation in real-life austenitic v-butt welds: Numerical modeling and validation. In Donald O. Thompson and Dale E. Chimenti, editors, *Review of Progress in Quantitative Nondestructive Evaluation*, volume 19A of *AIP Conference Proceedings*, pages 145 – 152, 1999.
- [10] Regina Hannemann, René Marklein, Torsten Kaczorowski, Karl-Jörg Langenberg, Christoph Schurig, Bernd Köhler, and Friedhelm Walte. Ultraschall-Impulsechopprüfung austenitischer Schweißnähte: Vergleich von Simulation und Messung. In *Berichtsband zur Jahrestagung der DGZfP*, volume 68, pages 327 – 335, 1999.
- [11] K. J. Langenberg, M. Brandfaß, R. Hannemann, T. Kaczorowski, J. Kostka, C. Hofmann, R. Marklein, K. Mayer, and A. Pitsch. *Wavefield Inversion*, volume 398 of *Courses and Lectures*, chapter Inverse Scattering with Acoustic, Electromagnetic, and Elastic Waves as applied in Nondestructive Evaluation, pages 59 – 118. Springer Wien, 1999.
- [12] Regina Hannemann, René Marklein, and Karl-Jörg Langenberg. Numerical modeling of elastic wave propagation in inhomogeneous anisotropic media. In *Proc. 7th ECNDT*, volume 3, pages 2406–2413, Broendby, Denmark, 1998.

- [13] René Marklein, Torsten Kaczorowski, Regina Hannemann, Karl-Jörg Langenberg, Bernd Köhler, Christoph Schurig, and Friedhelm Walte. Modellierung der Ultraschallausbreitung in austenitischen Schweißverbindungen — Strahlenverfolgung (ray tracing) gegenüber EFIT. In *Berichtsband zur Jahrestagung der DGZfP*, volume 63.2, pages 437 – 445, 1998.
- [14] Joachim Kostka, Regina Hannemann, René Marklein, and Karl-Jörg Langenberg. Ultraschallmodellierung mit EFIT: T-Stringer, Beton, rückwandverbundene Risse unterschiedlicher Orientierung. In *Berichtsband zur Jahrestagung der DGZfP*, volume 59.2, pages 949 – 958, 1997.
- [15] Uwe Berkemann, Anja Liffers, Regina Hannemann, Gerd Jakob, Christoph Lücking, Jürgen Mentel, and Gerd Schiffner. Investigation of rf excited CO<sub>2</sub> slab laser discharges by measuring N<sub>2</sub> emission bands with high spatial resolution. In *SPIE Proceedings*, volume 3092, pages 243 – 246, 1996.