

Eigene Veröffentlichungen und Vorträge

1. J. BERNTGEN, A. BEHRES, J. KLUTH, W. DAUMANN, U. AUER, F.-J. TEGUDE "Hooge Parameter of InGaAs Bulk Material and InGaAs 2DEG Quantum Well Structures Lattice Matched to InP", proc. of 15th Int. Conf. On noise in Physical Systems and 1/f Fluctuations, 23.-26.08.1999, Hong Kong, ed. C. Surya, 1999.
2. J. BERNTGEN, A. BEHRES, J. KLUTH, W. DAUMANN, U. AUER, F.-J. TEGUDE "Hooge Parameter of InGaAs Bulk Material and InGaAs 2DEG Quantum Well Structures Lattice Matched to InP", ISBN-1-874612-28-5, 1999.
3. J. BERNTGEN, K. HEIME, W. DAUMANN, U. AUER, F.-J. TEGUDE, AND A. MATULIONIS, "The 1/f Noise of InP Based 2DEG Devices and Ist Dependence on Mobility", IEEE Transactions on Electron Devices, vol. 46, no. 1, January 1999.
4. A. BRENNEMANN, W. DAUMANN, W. BROCKERHOFF, F.-J. TEGUDE, E. BUSHEHRI, V. STAROSELSKY, V. BRATOV, T. SCHLICHTER, "InP-based Logic Gates for Low Power Monolithic Optoelectronic Applications, (**invited paper**)", International Conference on Electronics, Circuits and Systems, Lissabon, Portugal, 7 - 10. Sept. 1998.
5. F.-J. TEGUDE, W. DAUMANN, R. REUTER, W. BROCKERHOFF, "InAlAs/-InGaAs/InP Dual-Gate HFET's: New aspects and properties" (**invited paper**), proceedings of Ninth International Conference of InP & Related Materials, 11.-15. May 1997, Hyannis, Cape Cod, Massachusetts, USA, p. 181-184, 1997.
6. W. DAUMANN, R.M. BERTENBURG, C. VAN DEN BERG, F.-J. TEGUDE, "Novel Resist- and Exposure Strategy for High Resolution Electron Beam Lithography", proceedings of the SPIE - The International Society for Optical Engineering, vol. 3155, p. 155-162, 1997.
7. W. DAUMANN, F. SCHEFFER, W. PROST, F.-J. TEGUDE, "High power InAlAs/-InGaAs/ InP-HFET grown by MOVPE", proc. of International Conference on Indium Phosphide and Related Materials, Cape Cod, Massachusetts, USA, p. 24-27, May 11-15, 1997.
8. W. DAUMANN, C. VAN DEN BERG, R.M. BERTENBURG, F.-J. TEGUDE, "High Resolution EBEAM Lithography using a novel resist and exposure strategy", proceedings of 169. WE-Heraeus Seminar, Bad Honnef, Germany, January 27-30, 1997.
9. W. DAUMANN, C. VAN DEN BERG, M. SCHIRMER, R.M. BERTENBURG, F.-J. TEGUDE, "Sub-100nm Mushroom-Gate EBEAM Fabrication Using a Novel Resist- and Exposure Strategy", proceedings of Phantoms Strategics Domain Meetings, Aachen, Germany, March 10-13, 1997.

10. **W. DAUMANN**, C. VAN DEN BERG, M.SCHIRMER, R. BERTENBURG, F.-J. TEGUDE, "Novel Resist- and Exposure Strategy for High Resolution Electron Beam Lithography", proc. of SPIE's International Symposium on Optical Science and Engineering, San Diego, USA, July 27-31, 1997.
11. **W. DAUMANN**, W. BROCKERHOFF, R. BERTENBURG, R. REUTER, U. AUER, W. MOLLS AND F.-J. TEGUDE, "On the advantages of InAlAs/InGaAs/InP Dual-Gate-HFET's in comparison to conventional Single-GateHFET's", proceedings of 8th IPRM, April 21-25, 1996, Schwäbisch Gmünd, Germany, p. 462-465, 1996.
12. **W. DAUMANN**, P. ELLRODT, W. BROCKERHOFF, R.M. BERTENBURG, R. REUTER, U. AUER, W. MOLLS, F.-J. TEGUDE, "InAlAs/InGaAs/InP HFET with suppressed impact ionization using dual-gate cascode-devices", IEEE Electron Device Letters, vol. 17, no. 10, p. 488-491, 1996.
13. **W. DAUMANN**, R. REUTER, M. AGETHEN, U. AUER, W. BROCKERHOFF, R.M. BERTENBURG, AND F.-J. TEGUDE, "Fabrication and high frequency analysis of InAlAs/InGaAs/InP Dual-Gate-HFET's with special emphasis to impact ionization", proceedings of Heterostructure Technology Workshop, Lille, Frankreich, Sept. 1996.
14. M. ENGELS, R.H. JANSEN, **W. DAUMANN**, R.M. BERTENBURG, F.-J. TEGUDE, "Design Methodology, Measurement and Application of MMIC Transmission line Transformer", proceedings of International Microwave Symposium (MTT-S), Orlando, USA, 1995.
15. D. PETERS, **W. DAUMANN**, W. BROCKERHOFF, R. REUTER, E. KOENIG, F.-J. TEGUDE, "Direct Calculation of the HBT Small-Signal Equivalent Circuit with Special Emphasis to the Feedback Capacitance", proceedings of the European Microwave Conference (EuMC'95), Bologna, Italy, September 1995.
16. D. PETERS, **W. DAUMANN**, W. BROCKERHOFF, R. REUTER, E. KOENIG, F.-J. TEGUDE, "New Direct Parameter Extraction Technique for Heterostructure Bipolar Transistors Using an Extended Equivalent Circuit", Semiconductor Characterization: Present Status and Future Trends, AIP Press, ISBN 1-56396-503-8, p. 664-668, 1995.
17. D. PETERS, W. BROCKERHOFF, R. REUTER, H. MESCHEDE, A. WIERSCH, B. BECKER, **W. DAUMANN**, U. SEILER, E. KOENIG, F.-J. TEGUDE, "Investigation of the High-Frequency Performance of AlGaAs/GaAs HBT's Down to 20K", proceedings of Bipolar/BiCMOS Circuits and Technology Meeting, Minneapolis, USA, 4.-5. October 1993.
18. D. PETERS, W. BROCKERHOFF, R. REUTER, H. MESCHEDE, A. WIERSCH, B. BECKER, **W. DAUMANN**, U. SEILER, E. KOENIG, F.-J. TEGUDE, "RF-characterization of AlGaAs/GaAs HBT down to 20K", ISBN 0 7503 0295 X, proceedings of the 20th. Int. Symp. on GaAs and Related Compounds, Freiburg, Germany, 29 August-2 September 1993.