

## List of Selected Publications

LEHRSTUHL FÜR TECHNISCHE ELEKTRONIK  
Prof. Dr. rer. nat. Doris Schmitt-Landsiedel  
Technische Universität München

### Monographs

- [1] P. Teichmann. Adiabatic Logic, *Springer Series in Advanced Microelectronics*, vol. 34. Springer, 2012.
- [2] F. Bauer. SRAM core-cell concepts for embedded SoC memories, *Selected Topics of Electronics and Micromechatronics*, vol. 36. Shaker, 2011.
- [3] M. Becherer. Nanomagnetic Logic in Focused Ion Beam Engineered Co/Pt Multilayer Films, *Selected Topics of Electronics and Micromechatronics*, vol. 38. Shaker, 2011.
- [4] C. Friederich. Control of Harmful Effects during the Program Operation in NAND Flash Memories, *Selected Topics of Electronics and Micromechatronics*, vol. 42. Shaker, 2011.
- [5] D. Schmitt-Landsiedel and C. Friederich. Von der Mikroelektronik zur Nanoelektronik. In C. Kehrt, P. Schüßler, and M.-D. Weitze, eds., *Neue Technologien in der Gesellschaft*, pp. 303–316. transcript, 2011.
- [6] J. Teich, J. Henkel, A. Herkersdorf, D. Schmitt-Landsiedel, W. Schröder-Preikschat, and G. Sneltin. Invasive Computing: An Overview. In M. Hübner and J. Becker, eds., *Multiprocessor System-on-Chip - Hardware Design and Tool Integration*, pp. 241–268. Springer, Berlin, Heidelberg, 2011.
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- [8] C. Friederich. Program and Erase of NAND memory arrays. In R. Micheloni, L. Crippa, and A. Marelli, eds., *Inside NAND Flash Memories*, pp. 55–88. Springer, 2010.
- [9] S. Henzler. Time-to-Digital Converters, *Springer Series in Advanced Microelectronics*, vol. 29. Springer, 2010.
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- [11] M. Eireiner. Power Supply Integrity in Low Power Designs, *Selected topics of Electronics and Micromechatronics*, vol. 32. Shaker, 2009.
- [12] M. Fulde. Variation Aware Analog and Mixed-signal Circuit Design in Emerging Multi-gate CMOS Technologies, *Springer Series in Advanced Microelectronics*, vol. 28. Springer, 2009.
- [13] W. Soldner. HF-ESD-Codesign, *Selected Topics of Electronics and Micromechatronics*, vol. 33. Shaker, 2009.
- [14] W. Kraus. Einfluss von Gate-Tunnelströmen auf Switched-Capacitor-Schaltungen, *Selected Topics of Electronics and Micromechatronics*, vol. 31. Shaker, 2008.
- [15] M. Augustyniak. CMOS Sensor Array for Electrochemical DNA Detection, *Selected Topics of Electronics and Micromechatronics*, vol. 26. Shaker, 2007.
- [16] S. Drüen. Virtual ESD Test - An ESD Analysis Methodology at Chip Level, *Selected Topics of Electronics and Micromechatronics*, vol. 25. Shaker, 2007.
- [17] S. Henzler. Power Management of Digital Circuits in Deep Sub-Micron CMOS-Technologies, *Springer Series in Advanced Microelectronics*, vol. 25. Springer, 2007.
- [18] G. Knoblinger, M. Fulde, and M. Pacha. FinFETs and Other Multi-Gate Transistors. In J. Collinge, ed., *Multi-Gate MOSFET Circuit Design*, pp. 293–335. Springer, 2007.
- [19] T. Nirschl. Circuit Applications of the Tunneling Field Effect Transistor (TFET), *Selected Topics of Electronics and Micromechatronics*, vol. 27. Shaker, 2007.
- [20] A. Bargagli-Stoffi. Ultra low-voltage, low-power amplifiers in deep sub-micrometer CMOS, *Selected Topics of Electronics and Micromechatronics*, vol. 23. Shaker, 2006.
- [21] B. Eversmann. CMOS-basierte Sensorarrays zur Detektion extrazellulärer neuronaler Signale, *Selected Topics of Electronics and Micromechatronics*, vol. 21. Shaker, 2006.
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- [23] C. H. Liau. Computational Intelligence-based Testing for Robust Circuit Design, *Selected Topics of Electronics and Micromechatronics*, vol. 22. Shaker, 2006.

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- [25] L. Gao. Silver Metal Organic Chemical Vapor Deposition for Microelectronic Metallization, *Selected Topics of Electronics and Micromechatronics*, vol. 15. Shaker, 2005.
- [26] T. Tille and D. Schmitt-Landsiedel. Mikroelektronik - Halbleiterbauelemente und deren Anwendung in elektronischen Schaltungen. Springer, 2005.
- [27] E. Amirante. Adiabatic Logic in Sub-Quartermicron CMOS Technologies, *Selected Topics of Electronics and Micromechatronics*, vol. 13. Shaker, 2004.
- [28] A. Castellazzi. Performance and reliability of PowerMOSFETs in the 42V-PowerNet, *Selected Topics of Electronics and Micromechatronics*, vol. 10. Shaker, 2004.
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## Journals, Conferences and other publications

- [1] S. Breitzkreutz, J. Kiermaier, I. Eichwald, C. Hildbrand, G. Csaba, D. Schmitt-Landsiedel, and M. Becherer. “Experimental Demonstration of a 1-bit Full Adder in Perpendicular Nanomagnetic Logic.” In *Proceedings of the 12th Joint MMM/Intermag Conference*, 2013.
- [2] I. Eichwald, J. Wu, J. Kiermaier, S. Breitzkreutz, G. Csaba, D. Schmitt-Landsiedel, and M. Becherer. “Towards a Signal Crossing in double-layer Nanomagnetic Logic.” In *Proceedings of the 12th Joint MMM/Intermag Conference*, 2013.
- [3] J. Kiermaier, S. Breitzkreutz, I. Eichwald, M. Engelstädter, X. Ju, G. Csaba, D. Schmitt-Landsiedel, and M. Becherer. “Information Transport in Field-coupled Nanomagnetic Logic Devices.” In *Proceedings of the 12th Joint MMM/Intermag Conference*, 2013.
- [4] M. Becherer, J. Kiermaier, S. Breitzkreutz, I. Eichwald, G. Csaba, and D. Schmitt-Landsiedel. “A non-volatile low-power zero-leakage nanomagnetic computing system.” In *Nature Conference 'Frontiers in Electronic Materials'*, 2012.
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- [10] J. Kiermaier, S. Breitzkreutz, G. Csaba, D. Schmitt-Landsiedel, and M. Becherer. “Electrical Input Structures for Nanomagnetic Logic Devices.” *Journal of Applied Physics*, vol. 111, no. 7, 2012.
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- [17] F. Chouard, S. More, M. Fulde, and D. Schmitt-Landsiedel. “An analog perspective on device reliability in 32nm high-k metal gate technology.” In *IEEE International Symposium on Design and Diagnostics of Electronic Circuits & Systems (DDECS)*, pp. 65–70, 2011.
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