

## Erschienene Publikationen Published Papers

- (1) **Metal-Organic Chemical Vapor Deposition of High-k Dielectric Ce–Al–O Layers from Various Metal-Organic Precursors for Metal–Insulator–Metal Capacitor Applications**  
A. Abrutis, M. Lukosius, M. Skapas, S. Stanionyte, V. Kubilius, Ch. Wenger, A. Zauner  
*Thin Solid Films* **536**, 68 (2013)
- (2) **A Terahertz Detector Array in a SiGe HBT Technology**  
R. Al Hadi, J. Grzyb, B. Heinemann, U.R. Pfeiffer  
*IEEE Journal of Solid State Circuits* **48**(9), 1 (2013)
- (3) **Performance Improvement of Silicon Micro-Cavity Modulators by Iteration of the p-i-n Intrinsic Region Width**  
A. Al-Saadi, B.A. Franke, S. Kupijai, C. Theiss, H. Rhee, S. Mahdi, L. Zimmermann, D. Stolarek, H.H. Richter, H.J. Eichler, U. Woggon, S. Meister  
*Proc. 39<sup>th</sup> European Conference and Exhibition on Optical Communication (ECOC 2013), We.1.B.3* (2013)
- (4) **Dislocation Luminescence in Highly Doped Degenerated Germanium at Room Temperature**  
T. Arguirov, O. Vyvenko, M. Oehme, J. Schulze, M. Kittler  
*Physica Status Solidi C* **10**, 56 (2013)
- (5) **Lead User bei der Entwicklung neuer Produkte**  
D. Baier, A. Sänn  
*wisu – Das Wirtschaftsstudium* **42**(6), 799 (2013)
- (6) **Antennas for Medical Implant Applications Operating in the MICS Band**  
T. Basmer, N. Todtenberg, F. Popiela, M. Birkholz, St. Ortman  
*Proc. 2013 IEEE MTT-S International Microwave Workshop Series on RF and Wireless Technologies for Biomedical and Healthcare Applications (IMWS-Bio 2013)*, (2013)
- (7) **Extending Wireless Body Sensor Networks using Intelligent Implants**  
T. Basmer, M. Birkholz  
*Proc. 12. GI/ITG KuVS Fachgespräch „Drahtlose Sensornetze“*, **41** (2013)
- (8) **Resistive Influence of HfO<sub>2</sub> Deposition Technique on Resistive Switching in MIM Devices**  
T. Bertaud, B. Hudec, M. Lukosius, E. Hildebrandt, M. Sowinska, D. Walczyk, St. Kubotsch, P. Calka, Ch. Walczyk, L. Alff, A. Rosova, E. Dobrocka, J. Derer, J. Fedor, A. Paskaleva, K. Fröhlich, T. Schoeder  
*Proc. 18<sup>th</sup> Conference Insulating Films on Semiconductors (INFOS 2013)*, abstr. book, 226 (2013)
- (9) **Großflächige Abscheidung von Graphen – ein wichtiger Schritt für neuartige Bauelemente**  
H. Beyer, M. Hofmann, S. Trutz, H. Lux, S. Stissel, W. Mehr, S. Schrader, P. Siemroth  
*Wissenschaftliche Beiträge der TH Wildau* **154** (2013)
- (10) **Oxygen-Deficient Oxide Growth by Subliming the Oxide Source Material: The Cause of Silicide Formation in Rare Earth Oxides on Silicon**  
O. Bierwagen, A. Proessdorf, M. Niehle, F. Grosse, A. Trampert, M. Klingsporn  
*Crystal Growth & Design* **13**(8), 3645 (2013)

- (11) **Biostabilität und Energieversorgung eines implantierbaren Glucosemonitors**  
M. Birkholz, T. Basmer, K.-E. Ehwald,  
M. Fröhlich, D. Genschow, C. Reich  
Proc. 8. Deutsches Biosensor Symposium  
(DBS 2013), V10 (2013)
- (12) **Sensing Glucose Concentrations at GHz Frequencies with a fully Embedded Biomicro-Electromechanical System (BioMEMS)**  
M. Birkholz, K.-E. Ehwald, T. Basmer,  
C. Reich, P. Kulse, J. Drews, D. Genschow,  
U. Haak, St. Marschmeyer, E. Matthus,  
K. Schulz, D. Wolansky, W. Winkler,  
T. Guschauski, R. Ehwald  
Journal of Applied Physics **113**, 244904  
(2013)
- (13) **Is Cross-Platform Protocol Stack Suitable for Sensor Networks? Empirical Evaluation**  
M. Brzozowski, P. Langendörfer  
Proc. 6<sup>th</sup> Joint IFIP Wireless & Mobile Networking Conference (WMNC 2013), (2013)
- (14) **Overview and Benchmarks of Pragmatic Debugging Techniques for Wireless Sensor Networks**  
M. Brzozowski, P. Langendörfer  
Proc. of the 21<sup>st</sup> International Conference on Software, Telecommunications and Computer Networks (SoftCOM 2013), (2013)
- (15) **Strain Analysis in SiN / Ge Microstructures obtained via Si-Complementary Metal Oxide Semiconductor Compatible Approach**  
G. Capellini, G. Kozłowski, Y. Yamamoto,  
M. Lisker, Ch. Wenger, G. Niu, P. Zaumseil,  
B. Tillack, A. Ghrib, M. de Kersauson,  
M. el Kurdi, P. Boucaud, T. Schroeder  
Journal of Applied Physics **113**, 013513  
(2013)
- (16) **Strained Germanium Heterostructures for Infrared and THz Light Emission**  
G. Capellini  
Proc. of the 8<sup>th</sup> International Conference on Silicon Epitaxy and Heterostructures (ICSI-8),  
13 (2013)
- (17) **Continuous Wave Phase-Sensitive Four-Wave Mixing in Silicon Waveguides with Reverse-Biased p-i-n Junctions**  
F. Da Ros, D. Vukovic, A. Gajda,  
L. Zimmermann, K. Petermann, C. Peucheret  
Proc. of the 39<sup>th</sup> European Conference and Exhibition on Optical Communication (ECOC 2013), (2013)
- (18) **Effect of Back-Gate on Contact Resistance and on Channel Conductance in Graphene-based Field-Effect Transistors**  
A. Di Bartolomeo, S. Santandrea, F. Giubileo,  
F. Romeo, M. Petrosino, R. Cirto, P. Barbara,  
G. Lupina, T. Schroeder, A. Rubino  
Diamond & Related Materials **38**, 19 (2013)
- (19) **Integrator and Digitizer for a Non-Coherent IR-UWB Receiver**  
J. Digel, M. Masini, M. Grözing, M. Berroth,  
G. Fischer, S. Olonbayar, H. Gustat,  
J.C. Scheytt  
Proc. IEEE Radio and Wireless Week  
(RWW 2013), 93 (2013)
- (20) **Building Blocks for an X-Band SiGe BiCMOS T/R Module**  
T. Dinc, I. Kalyoncu, M. Kaynak, Y. Gurbuz  
Proc. 13<sup>th</sup> Topical Meeting on Silicon Monolithic Integrated Circuits in RF Systems (SiRF 2013), 201 (2013)
- (21) **Building Blocks for an X-Band SiGe BiCMOS T/R Module**  
T. Dinc, I. Kalyoncu, M. Kaynak, Y. Gurbuz  
Proc. 2013 IEEE Radio and Wireless Week,  
(RWW 2013), 301 (2013)

- (22) **Improving the Security of Wireless Sensor Networks by Protecting the Sensor Nodes against Side Channel Attacks**  
Z. Dyka, P. Langendörfer  
Wireless Networks and Security Signals and Communication Technology, Springer, 303 (2013)
- (23) **60 GHz Broadband MAC System Design for Cable Replacement in Machine Vision Applications**  
M. Ehrig, M. Petri  
AEU - International Journal of Electronics and Communications **67**, 1118 (2013)
- (24) **A 220-245 GHz Switched Beam Butler Matrix in 0.13  $\mu\text{m}$  SiGe BiCMOS Technology**  
M. Elkhoully, M. Yanfei, Ch. Meliani, F. Ellinger, J.C. Scheytt  
Proc. IEEE Bipolar / BiCMOS Circuits and Technology Meeting (BCTM 2013), 119 (2013)
- (25) **A 240 GHz Direct Conversion IQ Receiver in 0.13  $\mu\text{m}$  SiGe BiCMOS Technology**  
M. Elkhoully, S. Glisic, Y. Mao, Ch. Meliani, F. Ellinger, J.C. Scheytt  
Proc. IEEE Radio Frequency Integrated Circuits Symposium, (RFIC 2013), (2013)
- (26) **A 245 GHz ASK Modulator and Demodulator with 40 GBit/sec Data Rate in 0.13  $\mu\text{m}$  SiGe BiCMOS Technology**  
M. Elkhoully, Y. Mao, Ch. Meliani, F. Ellinger, J.C. Scheytt  
Proc. International Microwave Symposium (IMS 2013), (2013)
- (27) **220-250 GHz Phased Array Circuits in 0.13  $\mu\text{m}$  SiGe BiCMOS Technology**  
M. Elkhoully, S. Glisic, Ch. Meliani, F. Ellinger, J.C. Scheytt  
IEEE Transactions on Microwave Theory and Techniques **61**(8), 3115 (2013)
- (28) **49 GHz 6-bit Programmable Divider in SiGe BiCMOS**  
A. Ergintav, Y. Sun, J.C. Scheytt, Y. Gurbuz  
Proc. IEEE Radio and Wireless Week (RWW 2013), 117 (2013)
- (29) **Spectral Peak Attenuation by GALS Design on Digital Switching Current**  
X. Fan, O. Schrape, M. Marinkovic, P. Dähnert, M. Krstic, E. Grass  
Proc. 19<sup>th</sup> IEEE International Symposium on Asynchronous Circuits and Systems, (2013)
- (30) **Cost-Efficient SOI Hybrid Coherent Receiver**  
S. Fedderwitz, T. Brast, K. Voigt, G.B. Preve, I. Lazarou, S. Dris, P. Bakopoulos, H. Avramopoulos, L. Zimmermann, A.G. Steffan  
Proc. Asia Communications and Photonics Conference (ACP-2013), AF3C.2 (2013)
- (31) **Electronic-Photonic Integration in the Helios Project**  
J.M. Fedeli, F. Schrank, W. Bogaerts, A. Masood, L. Zimmermann, E. Augendre, S. Bernabe, J. Kraft, P. Grosse, T. Enot  
Proc. of the 10<sup>th</sup> International Conference on Group IV Photonics (GFP 2013), 146 (2013)
- (32) **Sub-Micron Photonics Switches: Design, Fabrication and Characterization**  
H.N. Fernando, A. Stoll, R. Eisermann, S.H.N. Tharanga, R. Haynes, L. Zimmermann, M.M. Roth  
Proc. 2013 CLEO Pacific Rim Conference, WL4-7 (2013)
- (33) **High-Speed SiGe BiCMOS Technologies for Applications beyond 100 GHz**  
G.G. Fischer, B. Heinemann, M. Kaynak, H. Rucker  
Proc. European Microwave Integrated Circuits Conference (EuMIC 2013), 172 (2013)

- (34) **IR-UWB Single-Chip Transceiver for High-Band Operation Compliant to IEEE 802.15.4a**  
G. Fischer, D. Martynenko, O. Klymenko, S. Olonbayar, D. Kreiser, J. Digel, M. Masini, M. Grözing, R. Kraemer  
Proc. 2013 IEEE International Conference on Ultra-Wideband (ICUWB 2013), 276 (2013)
- (35) **Monolithic Integrated Circuits for UWB Transceivers**  
G. Fischer, J.C. Scheytt  
Ultra-Wideband RF System Engineering, Cambridge University Press, 94 (2013)
- (36) **Comparative Study of HBT Ageing in a Complementary SiGe:C BiCMOS Technology**  
G.G. Fischer, J. Molina  
Proc. 2013 Bipolar / BiCMOS Circuits and Technology Meeting (BCTM 2013), 167 (2013)
- (37) **Atomic Layer Deposition of Thin Oxide Films for Resistive Switching**  
K. Fröhlich, P. Jancovic, B. Hudec, J. Dérer, A. Paskaleva, T. Bertaud, T. Schroeder  
ECS Transactions **58**(10), 163, (2013)
- (38) **Moversight: An Approach to Support Mobility in Collaborative Applications**  
J. Gäbler, H. König  
Proc. of the IEEE IFIP Annual Conference on Wireless on-Demand Network Systems and Services (WONS 2013), 110 (2013)
- (39) **High Efficiency Wavelength Conversion of 40 Gbps Signals at 1550 nm in SOI Nano-Rib Waveguides Using p-i-n Diodes**  
A. Gajda, F. Da Ros, D. Vukovic, L. Zimmermann, C. Peucheret, B. Tillack, K. Petermann  
Proc. of the 10<sup>th</sup> International Conference on Group IV Photonics (GFP), 160 (2013)
- (40) **Rad-Hard 2.5 Gbps SpaceFibre Interface Device**  
R. Ginosar, T. Liran, D. Alon, R. Dobkin, M. Gioldberg, G. Sokolov, G. Burdo, N. Blatt, St. Parkes, P. Rastetter, M. Krstic, A. Crescenzo  
Proc. of the International Space System Engineering Conference (DASIA 2013), (2013)
- (41) **Miniaturized 122 GHz System-in-Package (SiP) Short Range Radar Sensor**  
M.G. Girma, S. Beer, J. Hasch, W. Debski, W. Winkler, Y. Sun, T. Zwick  
Proc. European Microwave Week 2013, 49 (2013)
- (42) **Integrated Dispersion Compensator Based on Apodized SOI Bragg Gratings**  
I. Giuntoni, D. Stolarek, J. Bruns, L. Zimmermann, B. Tillack, K. Petermann  
IEEE Photonics Technology Letters **25**(14), 1313 (2013)
- (43) **A High-Efficiency PA with 12.7 dBm P1dB and 32% PAE for 60 GHz Beamforming Applications in SiGe**  
S. Glisic, M. Elkhoully, Ch. Meliani  
Proc. European Microwave Week 2013 (EuMW 2013), 153 (2013)
- (44) **Anwendung eines HF-Gasphasenätzprozesses zum Freilegen von monolithisch integrierten RF-MEMS-Schaltern**  
A. Göritz, M. Fraschke, J. Drews, M. Wietstruck, S. Tolunay, M. Kaynak, B. Tillack  
Proc. Mikrosystemtechnik-Kongress 2013, 650 (2013)

- (45) **Characterization of Cobalt Germanide Nanostructures on Ge(001) Substrate: an STM Investigation on the Initial Phase of Metal Contact Formation to Ge**  
T. Grzela, W. Koczorowski, G. Capellini, N. Curson, S.R. Schofield, R. Czajka, T. Schroeder  
Proc. 9<sup>th</sup> Interregional Workshop on Advanced Nanomaterials (IWAN 2013), abstr. book, 30 (2013)
- (46) **Cobalt Germanide Nanostructures on Ge(001): A Combined STM, LEED, XPS and TEM Study on the Initial Phase of Metal Contact Formation to Ge**  
T. Grzela, W. Koczorowski, G. Capellini, R. Czajka, N. Curson, S.R. Schofield, T. Schroeder  
Proc. JSPS Core-to-Core Program Workshop „Atomically Controlled Processing for Ultralarge Scale Integration“, abstr. book 15 (2013)
- (47) **Early Growth Studies of Cobalt Germanides on Ge(001) Surface by Means of SPM Technique**  
T. Grzela, W. Koczorowski, R. Czajka, N. Curson, G. Capellini, T. Schroeder  
Proc. Materials for Advanced Metallization (MAM 2013), abstr. book, P7-10 (2013)
- (48) **CMOS Based Sensor for Dielectric Spectroscopy of Biological Cell Suspension**  
S. Guha, K. Schmalz, Ch. Meliani, Ch. Wenger  
Proc. XV. International Conference on Electrical Bio-Impedance (ICEBI 2013), abstr. (2013)
- (49) **CMOS Based Sensor for Dielectric Spectroscopy of Biological Cell Suspension**  
S. Guha, K. Schmalz, Ch. Meliani, Ch. Wenger  
Journal of Physics: Conference Series **434**, 012017 (2013)
- (50) **CMOS Lab on a Chip Device for Dielectric Characterization of Cell Suspensions based on a 6 GHz Oscillator**  
S. Guha, F.I. Jamal, K. Schmalz, Ch. Wenger, Ch. Meliani  
Proc. European Microwave Conference, European Microwave Week 2013 (EuMW 2013), 471 (2013)
- (51) **Phase Noise Modelling for Integrated PLLs in FMCW Radar**  
F. Herzel, A. Ergintav, Y. Sun  
IEEE Transactions on Circuits and Systems II **60**(3), 137 (2013)
- (52) **Spatial Manipulation of Nanoparticles and Biomolecules by AC Electric Fields**  
R. Hoelzel, Ch. Wenger, X. Knigge, E. Laux, U.Ch. Kaletta, K. Nicklas, F.F. Bier  
Proc. Nanobio Europe (NBE 2013), abstr. (2013)
- (53) **High-Efficiency Low-Voltage 24 GHz VCO in 130nm CMOS for FMCW Radar Applications**  
M. Hossain, U. Pursche, Ch. Meliani, W. Heinrich  
Proc. European Microwave Week 2013 (EuMW 2013), 105 (2013)
- (54) **Radiation Hard 0.13 Micron CMOS Library at IHP**  
U. Jagdhold  
Proc. Data Systems In Aerospace (DASIA 2013), (2013)
- (55) **Timing Jitter of Optical Clock Distribution Induced by Photodetection**  
K. Jamshidi, E. Krune, K. Voigt, K. Petermann, L. Zimmermann  
Proc. IEEE International Conference on Optical Interconnects 2013, 84 (2013)

- (56) **A 164 GHz Hetero-Integrated Source in InP-on-BiCMOS Technology**  
T. Jensen, T. Al-Sawaf, M. Lisker, S. Glisic, M. Elkhoully, T. Kraemer, I. Ostermay, Ch. Meliani, B. Tillack, V. Krozer, W. Heinrich  
Proc. European Microwave Week (EuMW 2013), 244 (2013)
- (57) **Monolithic Integrated SAW-Filter based on AlN for High-Frequency Applications**  
U.Ch. Kaletta, P.V. Santos, D. Wolansky, A. Scheit, M. Fraschke, Ch. Wipf, P. Zaumseil, Ch. Wenger  
Semiconductor Science and Technology **28**(6), 065013 (2013)
- (58) **Nanoelectrodes for Biomedical Applications**  
U.Ch. Kaletta, Ch. Wenger, X. Knigge, R. Hölzel  
Proc. Deutsches Biosensor Symposium (DBS 2013), 141 (2013)
- (59) **Investigation of Oxide Thin Films Deposited by Atomic Layer Deposition as Dopant Source for Ultra-shallow Doping of Silicon**  
B. Kalkofen, A.A. Amusan, M. Lisker, E.P. Burte  
Microelectronic Engineering **109**, 113 (2013)
- (60) **Investigation of Oxide Thin Films Deposited by Atomic Layer Deposition as Dopant Source for Ultra-Shallow Doping of Silicon**  
B. Kalkofen, A.A. Amusan, M. Lisker, E.P. Burte  
Proc. 18<sup>th</sup> Conference of Insulating Films on Semiconductors (INFOS 2013), abstr. book, 40 (2013)
- (61) **A 4-Bit SiGe Passive Phase Shifter for X-Band Phased Arrays**  
I. Kalyoncu, E. Ozeren, M. Kaynak, Y. Gurbuz  
Proc. 2013 IEEE Radio and Wireless Week (RWW 2013), 310 (2013)
- (62) **A 4-Bit SiGe Passive Phase Shifter for X-Band Phased Arrays**  
I. Kalyoncu, E. Ozeren, M. Kaynak, Y. Gurbuz  
Proc. 13<sup>th</sup> Topical Meeting on Silicon Monolithic Integrated Circuits in RF Systems (SiRF 2013), 210 (2013)
- (63) **Germanium tin: Silicon Photonics towards Mid Infrared**  
E. Kasper, M. Kittler, M. Oehme, T. Argyurov  
Photonics Research **1**(2), 69 (2013)
- (64) **Light from Germanium Tin Hetero-structures on Silicon**  
E. Kasper, M. Kittler, M. Oehme, T. Argyurov  
Proc. Photonics West 2013, SPIE Proceedings, **8628**, 86280J (2013)
- (65) **A CMOS Based Fast High-Voltage Generation Circuit for BiCMOS Embedded RF-MEMS Applications**  
M. Kaynak, M. Purdy, M. Wietstruck, W. Zhang, B. Tillack  
Proc. 13<sup>th</sup> Topical Meeting on Silicon Monolithic Integrated Circuits in RF Systems (SiRF 2013), 21 (2013)
- (66) **A 94 GHz Flip-Chip Packaged SiGe BiCMOS LNA on an LCP Substrate**  
W.T. Khan, C.A. Ulusoy, M. Kaynak, H. Schumacher, J. Papapolymerou  
Proc. International Microwave Symposium (IMS 2013), (2013)
- (67) **Intrinsic Point Defect Generation, Oxygen Precipitation, and Dislocation Propagation During Flash Lamp Annealing**  
G. Kissinger, D. Kot, M.A. Schubert, A. Sattler  
Proc. of the 27<sup>th</sup> International Conference on Defects in Semiconductors (ICDS 27), abstr. book, 132 (2013)

- (68) **Simulation of Vacancy Agglomeration Based on Ab Initio Calculations and Comparison with Experimental Results**  
G. Kissinger, J. Dabrowski, D. Kot  
Proc. 2013 JSAP-MRS Joint Symposia, Symposium H Smart Materials Design for Ultimate Functional Materials: Functional Core Concept, abstr. book 18p-M4-14 (2013)
- (69) **Enhanced DNS Message Compression – Optimizing mDNS / DNS-SD for the Use in 6LoWPANs**  
R. Klauck, M. Kirsche  
Proc. 9<sup>th</sup> IEEE International Workshop on Sensor Networks and Systems for Pervasive Computing, (2013)
- (70) **Characterization of Thin-Film a-Si:H /  $\mu$ c-Si:H Tandem Solar Cells on Glass Substrates**  
A. Klossek, Ch. Krause, T. Arguirov, H.-M. Krause, W. Seifert, F. Friedrich, O. Gabriel, B. Stannowski, M. Kittler  
Crystal Research and Technology **48**, 279 (2013)
- (71) **Growth Process of Microcrystalline Silicon Studied by Combined 2 Photoluminescence and Raman Investigations**  
A. Klossek, T. Arguirov, M. Ratzke, D. Mankovics, S. Kirner, F. Friedrich, O. Gabriel, B. Stannowski, R. Schlatmann, M. Kittler  
Journal of Applied Physics **114**, 223511 (2013)
- (72) **Dielektrophoretische Immobilisierung von Nanopartikeln und Proteinen an Nanoelektroden**  
X. Knigge, E. Laux, K. Nicklas, U.Ch. Kaletta, Ch. Wenger, R. Hölzel, F. Bier  
Proc. Deutsches Biosensor Symposium (DBS 2013), (2013)
- (73) **BiCMOS Integration of Photonic Components**  
D. Knoll  
Proc. Open Bipolar Workshop at BCTM 2013, (2013)
- (74) **Silicon Photonics-Wireless Interface ICs for Micro- / Millimeter-Wave Fiber-Wireless Networks**  
M. Ko, M.-J. Lee, H. Rücker, W.-Y. Choi  
Optics Express **21**(19), 22962 (2013)
- (75) **Formation and Characterization of 1D and 2D Ba Surface Structures on the Ge (100) Surface – an STM Study**  
W. Koczorowski, T. Grzela, G. Capellini, N.J. Curson, S.R. Schofield, M.W. Radny, R. Czajka, T. Schroeder  
Proc. 6<sup>th</sup> Polish Conference on Nanotechnology, abstr. book, 53 (2013)
- (76) **STM Characterization of BA Induced Passivation Layer on Ge(100) Surface**  
W. Koczorowski, T. Grzela, G. Capellini, S.R. Schofield, T. Schroeder, M.W. Radny, N.J. Curson, R. Czajka  
Proc. 9<sup>th</sup> Interregional Workshop on Advanced Nanomaterials (IWAN 2013), abstr. book 31 (2013)
- (77) **Energetic Spectra of Dislocation Networks Produced by Hydrophilic Bonding of Silicon Wafers**  
I. Kolevatov, M. Trushin, O. Vyvenko, M. Kittler, O. Kononchuk  
Physica Status Solidi C **10**, 20 (2013)

- (78) **First Monolithic GaAs IQ Electro-Optic Modulator, Demonstrated at 150 Gbit/s with 64-QAM**  
D. Korn, P.C. Schindler, Ch. Stamatiadis, M.F. O'Keefe, L. Stampoulidis, R. Schmogrow, P. Zakynthinos, N. Cameron, Y. Zhou, R.G. Walker, E. Kehayas, I. Tomkos, L. Zimmermann, R. Palmer, W. Freude, C. Koos, J. Leuthold  
Proc. Optical Fiber Communication Conference and Exposition / National Fiber Optic Engineers Conference (OFC/NFOEC 2013), PDP5C.4 (2013)
- (79) **Alignment of MG-63 Osteoblasts on Fibronectin-Coated Phosphorous Doping Lattices in Silicon**  
A. Körtge, S. Stähle, M. Birkholz, M. Fraschke, K. Schulz, J.G.B. Nebe, P. Elter  
World Academy of Science, Engineering and Technology **73**, 801 (2013)
- (80) **Characterization of Deep Levels Introduced by RTA and by Subsequent Anneals in n-Type Silicon**  
D. Kot, T. Mchedlidze, G. Kissinger, W. von Ammon  
ECS Journal of Solid State Science and Technology **2**(1), P9 (2013)
- (81) **Car-Router with Controlled Plug-In Capabilities**  
R. Kraemer, R. Meyfarth, K. Walther  
Proc. Embedded Systems Symposium, (2013)
- (82) **IHP Schaltungsprojekte: Übersicht über die Schaltungsdesignaktivitäten mit Fokus auf Raumfahrtanwendungen**  
R. Kraemer  
Proc. DLR Bauteilekonferenz (2013)
- (83) **InP-DHBT-on-BiCMOS Technology with  $f_T/f_{max}$  of 400/350 GHz for Heterogeneous Integrated Millimeter-Wave Sources**  
T. Kraemer, I. Ostermay, T. Jensen, T. Keinicke Johansen, F.-J. Schmueckle, A. Thies, V. Krozer, W. Heinrich, O. Krueger, G. Traenkle, M. Lisker, A. Trusch, P. Kulse, B. Tillack  
IEEE Transactions on Electron Devices **60**(7), 2209 (2013)
- (84) **On the Origin of Intense Luminescence at 0.93 eV from Multi-Crystalline Silicon**  
Ch. Krause, D. Mankovics, H.-M. Krause, T. Arguirov, M. Kittler  
Journal of Applied Physics **114**, 034902 (2013)
- (85) **Improvements of IEEE 802.15.4a for Usage in Automation Systems**  
D. Kreiser, S. Olonbayar  
Proc. 4<sup>th</sup> International Conference on Energy Aware Computing Systems & Applications, (2013)
- (86) **Photonic-Electronic Platform for Next Generation Optical Transport Network**  
M. Kroh, M. O'Keefe, K. Voigt, S. Fedderwitz, G. Battista Preve, St. Lischke, T. Brast, D. Petousi, Ch. Stamatiadis, E. Kehayas, R. Nogueira, D. Korn, D. Roccatto, Ph.C. Schindler, I. Lazarou, Ch. Koos, W. Freude, J. Leuthold, H. Avramopoulos, A.G. Steffan, L. Stampoulidis, L. Zimmermann  
Proc. 15<sup>th</sup> International Conference on Transparent Optical Networks (ICTON 2013), We.C2.1 (2013)





- (87) InP on BiCMOS Technology Platform for Millimeter-Wave and THz MMIC**  
V. Krozer, T. Jensen, T. Krämer, I. Ostermay, F.J. Schmückle, O. Krüger, W. Heinrich, M. Lisker, B. Tillack, Ch. Meliani  
Proc. Millimeter Waves and THz Technology Workshop (UCMMT 2013), (2013)
- (88) Guest Editor's Introduction: Special Issue on Signal Processing and Electronic Circuit Design for Next Generation Communication Systems**  
M. Krstic  
AEU – International Journal of Electronics and Communications **67**(12), 1086 (2013)
- (89) A Fully Integrated 120 GHz Six-Port Receiver Front-End in a 130 nm SiGe BiCMOS Technology**  
B. Lämmle, K. Schmalz, J. Borngräber, J.C. Scheytt, R. Weigel, A. Koelpin, D. Kissinger  
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- (2) **DFG-Forschergruppe FOR 653 „Aktive und abstimmbare mikroptonische Systeme auf der Basis von Silicon-On-Insulator (SOI)“**  
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- (3) **Optimizing Figure of Merit for Nonlinear Processes by Co-Design of p-i-n Junction and Silicon Nano-Rib Waveguide**  
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- (8) **Intermediate Report 2**  
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- (12) **Secure, Mobile Visual Sensor Networks Architecture**  
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- (13) **SILTRONIC – IHP Technology Report, Activity Report Q1 / Q2 2013**  
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- (14) **SOI-Nanowaveguides and Waveguide Diode Structures Fabricated in BiCMOS Technology**  
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| <p>(1) <b>Untersuchung von <math>CeO_{x,r}</math>, <math>PrO_{x-}</math> und <math>Ce_xPr_{1-x}O_{2-6}</math>-Filmen auf Si(111) mittels hochenergetischer Röntgen-Photoelektronenspektroskopie</b><br/>A. Allahgholi<br/>Dissertation, Universität Bremen, (2013)</p> <p>(2) <b>GALS Design Methodology Based on Pausible Clocking</b><br/>X. Fan<br/>Dissertation, Humboldt University of Berlin, (2013)</p> <p>(3) <b>Measurement, Characterization and Emulation of Wideband MIMO Channels</b><br/>J. Gutierrez Teran<br/>Dissertation, University of Cantabria, Santander, (2013)</p> <p>(4) <b>Oxygen Engineered Hafnium Oxide Thin Films Grown by Reactive Molecular Beam Epitaxy</b><br/>E. Hildebrandt<br/>Dissertation, TU Darmstadt, (2013)</p> <p>(5) <b>Optical Characterization of Thin-Film Si Solar Cells and Knowledge Transfer from Bulk mc-Si</b><br/>A. Klossek<br/>Dissertation, BTU Cottbus-Senftenberg, Cottbus, (2013)</p> <p>(6) <b>Zum thermischen Widerstand von Silicium-Germanium-Hetero-Bipolartransistoren</b><br/>F. Korndörfer<br/>Dissertation, TU Chemnitz, (2013)</p> | <p>(7) <b>Influence of Vacancies introduced by RTA on the Nucleation, Size, Morphology, and Gettering Efficiency of Oxygen Precipitates in silicon Wafers</b><br/>D. Kot<br/>Dissertation, BTU Cottbus, (2013)</p> <p>(8) <b>Design Methodology for highly Reliable Digital ASIC Designs Applied to Network-Centric System Middleware Switch Processor</b><br/>V. Petrovic<br/>Dissertation, BTU Cottbus, (2013)</p> <p>(9) <b>Material Science for High Performance SiGe HBTs: Solid-Phase Epitaxy and III-V/SiGe Hybrid Approaches</b><br/>O. Skibitzki<br/>Dissertation, BTU Cottbus, (2013)</p> <p>(10) <b>Enabling Functional Tests of Asynchronous Circuits Using a Test Processor Solution</b><br/>St. Zeidler<br/>Dissertation, BTU Cottbus, (2013)</p> |
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