



Publications from the Technology Platform "Power Electronics" of the Research Fab Microelectronics Germany (2019)

- Albrecht, M. et al. (2019): Improving 5V digital 4H-SiC CMOS ics for operating at 400°C using PMOS channel implantation. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.827. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071888854&doi=10.4028%2fwww.scientific.net%2fMSF.963.827&partnerID=40&md5=ad59c6a7fb8502a455aca564b4c1bd15>
- Amado-Rey, A.B. et al. (2019): GCPW GaAs Broadside Couplers at H-Band and Application to Balanced Power Amplifiers. In: IEEE Transactions on Microwave Theory and Techniques (Article). DOI: 10.1109/TMTT.2018.2873335. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85055676552&doi=10.1109%2fTMTT.2018.2873335&partnerID=40&md5=0e315c81c69ed4ecf8e8fcd9c4020031>
- Amat, E. et al. (2019): Quantum dot location relevance into SET-FET circuits based on FinFET devices. In: Proceedings - 33rd Conference on Design of Circuits and Integrated Systems, DCIS 2018 (Conference Paper). DOI: 10.1109/DCIS.2018.8681478. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85064717668&doi=10.1109%2fDCIS.2018.8681478&partnerID=40&md5=0815d335c771c6b73abd898e4966746a>
- Arzig, M. et al. (2019): Tracking of the growth interface during pvt-growth of SiC boules using a X-ray computed tomography setup. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.14. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071876799&doi=10.4028%2fwww.scientific.net%2fMSF.963.14&partnerID=40&md5=ee4000e3852dcd80b6ca230119013835>
- Arzig, M. et al. (2019): Investigation of the Growth Kinetics of SiC Crystals during Physical Vapor Transport Growth by the Application of In Situ 3D Computed Tomography Visualization. In: Advanced Engineering Materials (Article). DOI: 10.1002/adem.201900778. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85074522907&doi=10.1002%2fadem.201900778&partnerID=40&md5=c793df296b8c89c1bdf5efb616681ae6>

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**Publications from the Technology Platform “Power Electronics” of the Research Fab
Microelectronics Germany (2019)**

- Arzig, M. et al. (2019): Influence of morphological changes in a source material on the growth interface of 4H-SiC single crystals. In: Materials (Article). DOI: 10.3390/ma12162591. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85070967469&doi=10.3390%2fma12162591&partnerID=40&md5=7701ad159a4d7e33ce0646553cb3cc10>
- Bach, L. (2019): Stackable SiC Embedded Ceramic Packages for High Voltage and High Temperature Power Electronics Applications. In: IMAPS Additional Conferences (Device Packaging, HiTEC, HiTEN, & CICMT). Online journal (Conference Paper).
- Basler, M. (2019): A GaN-on-Si-based logic, driver and DC-DC converter circuit with closed-loop peak current-mode control. In: PCIM Europe 2019, International Exhibition and Conference for Power Electronics, Intelligent Motion, Renewable Energy and Energy Management. CD-ROM (Conference Paper).
- Bayer, C.F. (2019): Future Packaging Technologies in Power Electronic Modules. (Presentation).
- Bayer, C.F. et al. (2019): Enhancing partial discharge inception voltage of DBCs by geometrical variations based on simulations of the electric field strength. In: CIPS 2016 - 9th International Conference on Integrated Power Electronics Systems (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073359731&partnerID=40&md5=04679995b5b23ec98f235df7ff2f91b5>
- Bayer, C.F. et al. (2019): Enhancement of the partial discharge inception voltage of DBCs by adjusting the permittivity of the encapsulation. In: CIPS 2016 - 9th International Conference on Integrated Power Electronics Systems (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073371774&partnerID=40&md5=a6cca149c2578498bfedec6bed5bbb53>
- Bayer, Christoph (2019): Fraunhofer IISB erforscht Korrosion. In: Mikroelektronik Nachrichten. Ausgabe 74 (Zeitschriftenaufsatz).
- Beljakowa, S. et al. (2019): Diffusion of Phosphorus and Boron from Atomic Layer Deposition Oxides into Silicon. In: Physica Status Solidi (A) Applications and Materials Science (Article). DOI: 10.1002/pssa.201900306. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85070518822&doi=10.1002%2fpssa.201900306&partnerID=40&md5=46624e771d35a64cd9c7be2e319e5c92>
- Benedetto, L. et al. (2019): First Experimental Test on Bipolar Mode Field Effect Transistor Prototype in 4H-SiC. A Proof of Concept. In: Silicon Carbide and Related Materials 2018 (Conference Paper).

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Besendörfer, S. et al. (2019): Methodology for the investigation of threading dislocations as a source of vertical leakage in AlGaIn/GaN-HEMT heterostructures for power devices. In: Journal of Applied Physics (Article). DOI: 10.1063/1.5065442. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85062733513&doi=10.1063%2f1.5065442&partnerID=40&md5=e43bf898937a30e52b6347502c1b1fc9>
- Bockrath, S. et al. (2019): State of Charge Estimation using Recurrent Neural Networks with Long Short-Term Memory for Lithium-Ion Batteries. In: IECON 2019, IEEE 45th Annual Conference of the Industrial Electronics Society (Conference Paper).
- Boettcher, L. et al. (2019): 3D modular power electronic systems, based on embedded components. In: Advancing Microelectronics (Article). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071564459&partnerID=40&md5=26768e467cc7ff1b8e956670aec255ac>
- Boettcher, N. et al. (2019): Silicon RC-Snubber for 900 v Applications Utilising non-Stoichiometric Silicon Nitride. In: Proceedings of the International Symposium on Power Semiconductor Devices and ICs (Conference Paper). DOI: 10.1109/ISPSD.2019.8757589. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073912067&doi=10.1109%2fISPSD.2019.8757589&partnerID=40&md5=b4028ca2830f9ab99892b2a1cc15e591>
- Buettner, J. et al. (2019): Technological advances towards 4H-SiC JBS diodes for wind power applications. In: Lecture Notes in Electrical Engineering (Conference Paper). DOI: 10.1007/978-3-030-11973-7_11. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85066885034&doi=10.1007%2f978-3-030-11973-7_11&partnerID=40&md5=c8cd8faabcbf242ff540daea35909d69
- Capelli, M. et al. (2019): Increased nitrogen-vacancy centre creation yield in diamond through electron beam irradiation at high temperature. In: Carbon (Article). DOI: 10.1016/j.carbon.2018.11.051. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85057362736&doi=10.1016%2fj.carbon.2018.11.051&partnerID=40&md5=7a4572bfac1db3c6c05f4b949f8750fc>
- Carrubba, V. et al. (2019): Source/load pull investigation of AlGaIn/GaN power transistors with ultra-high efficiency. In: 8th German Microwave Conference, GeMiC 2014 (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073148102&partnerID=40&md5=8d392bfeaa5fde463f9b3b86b3e23520>
- Chen, Y.-C. et al. (2019): Laser Writing of Scalable Single Color Centers in Silicon Carbide. In: Nano Letters (Article). DOI: 10.1021/acs.nanolett.8b05070. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85064192039&doi=10.1021%2fac.nanolett.8b05070&partnerID=40&md5=6257326cfc77899268c673df2c70e7b>

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Cwiklinski, M. et al. (2019): 190-GHz G-Band GaN Amplifier MMICs with 40GHz of Bandwidth. In: IEEE MTT-S International Microwave Symposium Digest (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85069955058&partnerID=40&md5=5e9d4c77603db88a3a0cf97a207b007f>
- Cwiklinski, M. et al. (2019): D-Band and G-Band High-Performance GaN Power Amplifier MMICs. In: IEEE Transactions on Microwave Theory and Techniques (Article). DOI: 10.1109/TMTT.2019.2936558. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85072520107&doi=10.1109%2fTMTT.2019.2936558&partnerID=40&md5=a81fa90fa148f3599cbe7cb3ee953959>
- Demumieux, P. et al. (2019): Design of a low-capacitance planar transformer for a 4 kW/500 kHz DAB converter. In: Conference Proceedings - IEEE Applied Power Electronics Conference and Exposition - APEC (Conference Paper). DOI: 10.1109/APEC.2019.8722279. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85067097474&doi=10.1109%2fAPEC.2019.8722279&partnerID=40&md5=b5b61e9e83cf181fdd125d3b7b56ebe0>
- Di Benedetto, L. et al. (2019): First experimental test on bipolar mode field effect transistor prototype in 4H-SiC: A proof of concept. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.697. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071875692&doi=10.4028%2fwww.scientific.net%2fMSF.963.697&partnerID=40&md5=f9b1395025217683068c78c81afef69d>
- Diepgen, A. (2019): Parylene Coatings in Power Electronic Modules. (Presentation).
- Dirksen, D. (2019): Bewertung von Bondverbindungen - Möglichkeiten, Normen und Herausforderungen. (Vortrag).
- Dirksen, D. (2019): Optimierung und Qualifizierung eines Bondprozesses. Tests und Analyseverfahren. (Presentation).
- Dudek, R. et al. (2019): Coupled electro-thermo-mechanical analyses on power cycling induced loadings in sintered silver IGBT-modules with and without overmolding. In: CIPS 2016 - 9th International Conference on Integrated Power Electronics Systems (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073335745&partnerID=40&md5=93b29ce856777f122ec3d93d3c1f6dc6>
- Ehrhardt, C. et al. (2019): Influence of wire material and diameter on the reliability of Al-H11, Al-CR, Al-R and AlX heavy wire bonds during power cycling. In: CIPS 2016 - 9th International Conference on Integrated Power Electronics Systems (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85029911802&partnerID=40&md5=6c0febb0dee2a359e78b67bf74e174db>

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Ehrlich, S. et al. (2019): Comprehensive SPICE model for power inductor losses. In: Conference Proceedings - IEEE Applied Power Electronics Conference and Exposition - APEC (Conference Paper). DOI: 10.1109/APEC.2019.8722180. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85067096146&doi=10.1109%2fAPEC.2019.8722180&partnerID=40&md5=40cf0035c51cae82765252c7a75173c6>
- Endruschat, A. et al. (2019): A Universal SPICE Field-Effect Transistor Model Applied on SiC and GaN Transistors. In: IEEE Transactions on Power Electronics (Article). DOI: 10.1109/TPEL.2018.2889513. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85058982015&doi=10.1109%2fTPEL.2018.2889513&partnerID=40&md5=36c3d245a938f38a18f85dd3513f4848>
- Erdmann, A. et al. (2019): 3D mask effects in high NA EUV imaging. In: Proceedings of SPIE - The International Society for Optical Engineering (Conference Paper). DOI: 10.1117/12.2515678. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85064569997&doi=10.1117%2f12.2515678&partnerID=40&md5=8f27c13775b8a388e35b1e50f54b3b0f>
- Erlbacher, T. (2019): TSV-based passive networks for monolithic integration in smartpower ICS for automotive applications. (Presentation).
- Erlbacher, T. (2019): SiC device manufacturing using ion implantation. Opportunities and challenges. (Presentation).
- Erlekampf, J. et al. (2019): Deeper insight into lifetime-engineering in 4H-SiC by ion implantation. In: Journal of Applied Physics (Article). DOI: 10.1063/1.5092429. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85070099547&doi=10.1063%2f1.5092429&partnerID=40&md5=7bb37436ef6211339e017daa05231c22>
- Ersoy, E. et al. (2019): A compact GaN-MMIC non-uniform distributed power amplifier for 2 to 12 GHz. In: 8th German Microwave Conference, GeMiC 2014 (Conference Paper). DOI: . Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073168342&partnerID=40&md5=b3678abe87fc7daf73e23248e839ed93>
- Fischer, K. et al. (2019): Exploring the Causes of Power-Converter Failure in Wind Turbines based on Comprehensive Field-Data and Damage Analysis. In: Energies (Article). DOI: 10.3390/en12040593. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85061962309&doi=10.3390%2fen12040593&partnerID=40&md5=9df8996565321fb1c508115c5b5a39cd>
- Fleischmann, S. et al. (2019): Influence of quartz on silicon incorporation in HVPE grown AlN. In: Journal of Crystal Growth (Article). DOI: 10.1016/j.jcrysgro.2018.11.028. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85057776958&doi=10.1016%2fj.jcrysgro.2018.11.028&partnerID=40&md5=9a2ee126b7ff546e653dda099aa6895b>

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Franz, J. et al. (2019): Optimized swing equation control for battery energy storage systems. In: Proceedings - 2019 IEEE 13th International Conference on Compatibility, Power Electronics and Power Engineering, CPE-POWERENG 2019 (Conference Paper). DOI: 10.1109/CPE.2019.8862345. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85074128531&doi=10.1109%2fCPE.2019.8862345&partnerID=40&md5=c1e2ab189d403550b97f1ce2ce34bf18>
- Friedrich, J. et al. (2019): Considerations on the limitations of the growth rate during pulling of silicon crystals by the Czochralski technique for PV applications. In: Journal of Crystal Growth (Article). DOI: 10.1016/j.jcrysgro.2019.125168. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85069934993&doi=10.1016%2fj.jcrysgro.2019.125168&partnerID=40&md5=6a97ec11214828af697541f75be4610f>
- Gepp, M. (2019): Spatial and Temporal Temperature Homogenization in an Automotive Lithium-Ion Pouch Cell Battery Module. (Conference Paper).
- Grams, A. et al. (2019): Simulation of the lifetime of wire bonds modified through wedge trenches for higher reliability. In: CIPS 2016 - 9th International Conference on Integrated Power Electronics Systems (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85054802128&partnerID=40&md5=ab3dabfd9740ef47fabf5b0723580e06>
- Grünler, S. et al. (2019): Towards highly integrated, automotive power SoCs using capacitors operating at 100 V implemented in TSV. In: CIPS 2016 - 9th International Conference on Integrated Power Electronics Systems (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85063116446&partnerID=40&md5=9fc48147080c36697a8022f6347b0e48>
- Gundel, P. et al. (2019): Thermal performance and reliability of copper thick film substrates. In: CIPS 2016 - 9th International Conference on Integrated Power Electronics Systems (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073344794&partnerID=40&md5=40b3973e46709e8063ba1f8c34b378fa>
- Hagedorn, S. et al. (2019): Stabilization of sputtered AlN/sapphire templates during high temperature annealing. In: Journal of Crystal Growth (Article). DOI: 10.1016/j.jcrysgro.2019.02.024. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85061536098&doi=10.1016%2fj.jcrysgro.2019.02.024&partnerID=40&md5=60e3efe3f926f1e0d89d1fc11d4d3d8d>
- Hagedorn, S. et al. (2019): AlN and AlN/Al₂O₃ seed layers from atomic layer deposition for epitaxial growth of AlN on sapphire. In: Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films (Article). DOI: 10.1116/1.5079473. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85060867890&doi=10.1116%2f1.5079473&partnerID=40&md5=84ced4181f29d74e1f0f99ccb04bee90>

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Hellinger, C. (2019): Low-resistance ohmic contact formation by laser annealing of N-implanted 4H-SiC. (Poster).
- Hicks, M.-L. et al. (2019): Optimizing reactive ion etching to remove sub-surface polishing damage on diamond. In: Journal of Applied Physics (Article). DOI: 10.1063/1.5094751. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85068421888&doi=10.1063%2f1.5094751&partnerID=40&md5=faece4591d19e8a533f7ad9af87ae852>
- Hilt, O. et al. (2019): Lateral and vertical power transistors in GaN and Ga₂O₃. In: IET Power Electronics (Article). DOI: 10.1049/iet-pel.2019.0059. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85075830186&doi=10.1049%2fiet-pel.2019.0059&partnerID=40&md5=c0bf36ae4103676f3bcb17b91bd5a573>
- Huang, Y. et al. (2019): The impact of non-ideal ohmic contacts on the performance of high-voltage SiC MPS diodes. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.553. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071847855&doi=10.4028%2fwww.scientific.net%2fMSF.963.553&partnerID=40&md5=80f388a5082784d0c7263795295a6b41>
- Hutter, M. et al. (2019): Comparison of different technologies for the die attach of power semiconductor devices conducting active power cycling. In: CIPS 2016 - 9th International Conference on Integrated Power Electronics Systems (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073354492&partnerID=40&md5=d783d1dd9219969575bb2c8532bd077e>
- Hutzler, A. et al. (2019): In Situ Liquid Cell TEM Studies on Etching and Growth Mechanisms of Gold Nanoparticles at a Solid–Liquid–Gas Interface. In: Advanced Materials Interfaces (Article). DOI: 10.1002/admi.201901027. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071853879&doi=10.1002%2fadmi.201901027&partnerID=40&md5=40a3a6353b722b2de73abd308cdf019d>
- Hutzler, A. et al. (2019): Large-Area Layer Counting of Two-Dimensional Materials Evaluating the Wavelength Shift in Visible-Reflectance Spectroscopy. In: Journal of Physical Chemistry C (Article). DOI: 10.1021/acs.jpcc.9b00957. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85063483052&doi=10.1021%2facp.jpcc.9b00957&partnerID=40&md5=5df0ae327ee32bc24fe1ccb4f753a9a8>
- Hutzler, A. et al. (2019): Preparation of graphene-supported microwell liquid cells for in situ transmission electron microscopy. In: Journal of Visualized Experiments (Article). DOI: 10.3791/59751. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85070469098&doi=10.3791%2f59751&partnerID=40&md5=1e9baab933015f273c11fe8cdf54e69e>

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Kaiser, J. et al. (2019): Converter overvoltage protection for DC-Grids. In: INTELEC, International Telecommunications Energy Conference (Proceedings) (Conference Paper). DOI: 10.1109/INTLEC.2018.8612423. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85061782463&doi=10.1109%2fINTLEC.2018.8612423&partnerID=40&md5=a9c6a726c98f2853f8ef4f8a06b04213>
- Kallinger, B. et al. (2019): Influence of substrate properties on the defectivity and minority carrier lifetime in 4H-SiC homoepitaxial layers. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.109. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071883419&doi=10.4028%2fwww.scientific.net%2fMSF.963.109&partnerID=40&md5=fedd7bb2108d8212008e256567d863b1>
- Kim, H.-K. et al. (2019): Surface characterization of ion implanted 4H-SiC epitaxial layers with ion energy and concentration variations. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.429. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071868321&doi=10.4028%2fwww.scientific.net%2fMSF.963.429&partnerID=40&md5=b5a037ef62d14b231fc95ab9b13d34e8>
- Klein, K. et al. (2019): Study on packaging and driver integration with GaN switches for fast switching. In: CIPS 2016 - 9th International Conference on Integrated Power Electronics Systems (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073363209&partnerID=40&md5=1da610bd63c6d0d5e865e4de0923f4b3>
- Klupfel, F.J. (2019): A Compact Model Based on Bardeen's Transfer Hamiltonian Formalism for Silicon Single Electron Transistors. In: IEEE Access (Article). DOI: 10.1109/ACCESS.2019.2924913. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85068919013&doi=10.1109%2fACCESS.2019.2924913&partnerID=40&md5=d5a75a2d825436ae1b18f9ea4c8c79fc>
- Klupfel, F.J. (2019): Influence of Sacrificial Layer Germanium Content on Stacked-Nanowire FET Performance. In: IEEE Access (Article). DOI: 10.1109/ACCESS.2019.2925201. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85068836556&doi=10.1109%2fACCESS.2019.2925201&partnerID=40&md5=0fea06ebd37ab76e3c37a098c47a53e1>
- Knetzger, M. et al. (2019): Theoretical aspects and microstructural investigations on V-pit defects in HVPE grown GaN. In: Journal of Crystal Growth (Article). DOI: 10.1016/j.jcrysgro.2019.04.012. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85064705072&doi=10.1016%2fj.jcrysgro.2019.04.012&partnerID=40&md5=e080ea599bfd260bc4f32818a213420a>

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Kocher, M. (2019): Influence of shallow pits and device design of 4H-SiC VDMOS transistors on in-line defect analysis by using PL scanning. (Poster).
- Kocher, M. et al. (2019): Decoration of Al implantation profiles in 4H-SiC by bevel grinding and dry oxidation. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.441. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071873309&doi=10.4028%2fwww.scientific.net%2fMSF.963.441&partnerID=40&md5=21a9704a3eb0e2670c7852336c1191ec>
- Kocher, M. et al. (2019): Determination of compensation ratios of Al-implanted 4H-SiC by TCAD modelling of TLM measurements. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.445. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071845897&doi=10.4028%2fwww.scientific.net%2fMSF.963.445&partnerID=40&md5=fa66a4253f57eb84c1dcdec29f81e494>
- Krach, F. et al. (2019): Innovative monolithic RC-snubber for fast switching power modules. In: CIPS 2016 - 9th International Conference on Integrated Power Electronics Systems (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85046779960&partnerID=40&md5=503f244da5e34b6cb992ad515fa2303f>
- Lebedev, V. et al. (2019): Formation of icosahedron twins during initial stages of heteroepitaxial diamond nucleation and growth. In: Journal of Applied Physics (Article). DOI: 10.1063/1.5085184. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85062092617&doi=10.1063%2f1.5085184&partnerID=40&md5=de19bf72bd61e6b2a79142572d473174>
- Leone, S. et al. (2019): Optimization of Metal-Organic Chemical Vapor Deposition Regrown n-GaN. In: Physica Status Solidi (B) Basic Research (Article). DOI: 10.1002/pssb.201900436. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85074789596&doi=10.1002%2fpssb.201900436&partnerID=40&md5=bd99c1d8d91f71ca178f85e58d2ce465>
- Lim, M. et al. (2019): Pre-deposition interfacial oxidation and post-deposition interface nitridation of LPCVD TEOS used as gate dielectric on 4H-SiC. (Poster).
- Liu, T. et al. (2019): Raman characterization of carrier concentrations of Al-implanted 4H-SiC with low carrier concentration by photo-generated carrier effect. In: Crystals (Article). DOI: 10.3390/cryst9080428. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073279789&doi=10.3390%2fcryst9080428&partnerID=40&md5=241edc2f7482f0d71b45c83bac3b98bf>

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Lösch, H. et al. (2019): A spectroscopic investigation of Eu³⁺ incorporation in LnPO₄ (Ln = Tb, Gd_{1-x}Lu_x, X = 0.3, 0.5, 0.7, 1) ceramics. In: *Frontiers in Chemistry* (Article). DOI: 10.3389/fchem.2019.00094. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85068575149&doi=10.3389%2ffchem.2019.00094&partnerID=40&md5=81c856e438afadbd4d3193908e4a6059>
- Lukin, G. et al. (2019): Heteroepitaxial growth of GaN on sapphire substrates by high temperature vapor phase epitaxy. In: *Journal of Crystal Growth* (Article). DOI: 10.1016/j.jcrysgr.2019.125185. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85070190937&doi=10.1016%2fj.jcrysgr.2019.125185&partnerID=40&md5=159ed8143cba9868d201dcf0f6f743b4>
- Matthus, C.D. et al. (2019): Wavelength-selective 4H-SiC UV-sensor array. In: *Materials Science in Semiconductor Processing* (Article). DOI: 10.1016/j.mssp.2018.10.019. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85055657990&doi=10.1016%2fj.mssp.2018.10.019&partnerID=40&md5=5817d35785960ecc4f7117924087fbe4>
- Middendorf, A. et al. (2019): Reliability enhancing of heavy wire bonds through manipulation of geometry by laser. In: *ECWC 2014 - 13th Electronic Circuits World Convention: Connecting the World* (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073557659&partnerID=40&md5=aea75a3d4bab867d3cb5a8fc3496fecc>
- Moench, S. et al. (2019): Integrated Current Sensing in GaN Power ICs. In: *Proceedings of the International Symposium on Power Semiconductor Devices and ICs* (Conference Paper). DOI: 10.1109/ISPSD.2019.8757678. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073897259&doi=10.1109%2fISPSD.2019.8757678&partnerID=40&md5=b11fcfe2e23c5416a74ffe877f341e9d>
- Mogilatenko, A. et al. (2019): Crystal defect analysis in AlN layers grown by MOVPE on bulk AlN. In: *Journal of Crystal Growth* (Article). DOI: 10.1016/j.jcrysgr.2018.10.021. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85054756910&doi=10.1016%2fj.jcrysgr.2018.10.021&partnerID=40&md5=954c532aa83e16332f98c4a29b02d617>
- Mouawad, B. et al. (2019): Low inductance 2.5kV packaging technology for SiC switches. In: *CIPS 2016 - 9th International Conference on Integrated Power Electronics Systems* (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84996968506&partnerID=40&md5=12c1b250c0bea174ff8fbaad8a181fa0>
- Mulazzi, M. et al. (2019): The electronic structure of ϵ -Ga₂O₃. In: *APL Materials* (Article). DOI: 10.1063/1.5054395. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85060439376&doi=10.1063%2f1.5054395&partnerID=40&md5=c64f39fe0c60472c23415d2b111768cc>

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Ni, W. et al. (2019): 1700V 34mΩ 4H-SiC MOSFET with retrograde doping in junction field-effect transistor region. In: 2019 IEEE International Conference on Electron Devices and Solid-State Circuits, EDSSC 2019 (Conference Paper). DOI: 10.1109/EDSSC.2019.8754174. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85069470327&doi=10.1109%2fEDSSC.2019.8754174&partnerID=40&md5=4495eed125078d506c5c0d4dcf1d8b0f>
- Öchsner, R. et al. (2019): Research Platform: Decentralized Energy System for Sector Coupling. In: Chemical Engineering and Technology (Article). DOI: 10.1002/ceat.201800714. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85068219010&doi=10.1002%2fceat.201800714&partnerID=40&md5=bc0bfe029293602f519d39026f27d3fb>
- Pfeffer, M. et al. (2019): Advanced wafer container contamination control methods and strategies in power device manufacturing. In: IEEE International Symposium on Semiconductor Manufacturing Conference Proceedings (Conference Paper). DOI: 10.1109/ISSM.2018.8651151. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85063225580&doi=10.1109%2fISSM.2018.8651151&partnerID=40&md5=7d3bf0547b217717916b6ab21bd80b3e>
- Philipsen, V. et al. (2019): Mask absorber development to enable next-generation EUVL. In: Proceedings of SPIE - The International Society for Optical Engineering (Conference Paper). DOI: 10.1117/12.2537967. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85070063827&doi=10.1117%2f12.2537967&partnerID=40&md5=bef5f3ab3a37483fd36e17a3b31ff7e>
- Pichler, P. et al. (2019): Channeling in 4H-SiC from an application point of view. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.386. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071885729&doi=10.4028%2fwww.scientific.net%2fMSF.963.386&partnerID=40&md5=3a1efaf2d07b6b157084bbd87945b5a3>
- Puls, P. et al. (2019): Hybrid Cooling Towers in a Free-Cooling Application: Modeling and Field Measurement Verification. In: Chemical Engineering and Technology (Article). DOI: 10.1002/ceat.201800712. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85068062688&doi=10.1002%2fceat.201800712&partnerID=40&md5=5328ee1f42bd356091c1a77f85452882>
- Rattmann, G. et al. (2019): On a Novel Source Technology for Deep Aluminum Diffusion for Silicon Power Electronics. In: Physica Status Solidi (A) Applications and Materials Science (Article). DOI: 10.1002/pssa.201900167. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85069822759&doi=10.1002%2fpssa.201900167&partnerID=40&md5=a9dbb07c56dec0ca2446e3d2d7425278>

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Richter, E. et al. (2019): Growth and Properties of Intentionally Carbon-Doped GaN Layers. In: Crystal Research and Technology (Article). DOI: 10.1002/crat.201900129. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85074570501&doi=10.1002%2fcrat.201900129&partnerID=40&md5=5d0e772638dc994e59736dc272cff01d>
- Roscher, S. et al. (2019): High voltage electrochemical exfoliation of graphite for high-yield graphene production. In: RSC Advances (Article). DOI: 10.1039/c9ra04795f. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85072570496&doi=10.1039%2fc9ra04795f&partnerID=40&md5=26ed261170c7eeabe14ad96208ebf4bf>
- Ruccius, B. et al. (2019): A Cascaded Control Concept for Modular Multilevel Converters with Capacitor Voltage Estimation using a Kalman Filter. In: ICPE 2019 - ECCE Asia - 10th International Conference on Power Electronics - ECCE Asia (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071636034&partnerID=40&md5=bbd6b2547e9be94e8cddf87555c21dd>
- Rusch, O. (2019): Reducing On-Resistance for SiC Diodes by Thin Wafer and Laser Anneal Technology. (Poster).
- Rusch, O. et al. (2019): Influence of trench design on the electrical properties of 650v 4H-SiC JBS diodes. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.549. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071869099&doi=10.4028%2fwww.scientific.net%2fMSF.963.549&partnerID=40&md5=6513d44adeb575d774df81a0dcb4902e>
- Saponara, S. et al. (2019): Integrated Passive Devices and Switching Circuit Design for a 3D DC/DC Converter up to 60 v. In: Journal of Circuits, Systems and Computers (Article). DOI: 10.1142/S0218126620500395. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85066089115&doi=10.1142%2fS0218126620500395&partnerID=40&md5=26a70c6f036022b21c8252a22c1aabaf>
- Schletz, A. (2019): State of the Art Packaging. (Presentation).
- Schletz, A. (2019): Temperature Challenges for Integrated Systems due to High Power Density. (Presentation).
- Schletz, A. (2019): Testing Wide Band-Gap Devices II (Focus on Packaging). (Presentation).
- Schletz, A. (2019): Robuste und zuverlässige Leistungselektronik: Umwelt- und Lebensdauertests. (Presentation).
- Schlichting, H. (2019): Influence of Aluminum Compensation Effects in 4H-SiC on the Performance of VDMOS Transistors. (Poster).

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Schlichting, H. et al. (2019): Design considerations for robust manufacturing and high yield of 1.2 kv 4H-SiC VDMOS transistors. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.763. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071840182&doi=10.4028%2fwww.scientific.net%2fMSF.963.763&partnerID=40&md5=f4cfc6b9a59d29f40a561c6bd6a97c137>
- Schriefer, T. et al. (2019): Mechanical reliability of power electronic systems. In: CIPS 2016 - 9th International Conference on Integrated Power Electronics Systems (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073383032&partnerID=40&md5=80996c856b4150f263058489d6cfeae4>
- Schriefer, T. et al. (2019): Parameter Study on the Electrical Contact Resistance of Axially Canted Coil Springs for High-current Systems. In: Electrical Contacts, Proceedings of the Annual Holm Conference on Electrical Contacts (Conference Paper). DOI: 10.1109/HOLM.2018.8611640. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85061772398&doi=10.1109%2fHOLM.2018.8611640&partnerID=40&md5=504cf18173ab804a292bc89c985ee446>
- Schriefer, T. et al. (2019): A hybrid frequency-time-domain approach to determine the vibration fatigue life of electronic devices. In: Microelectronics Reliability (Article). DOI: 10.1016/j.microrel.2019.04.001. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85065418049&doi=10.1016%2fj.microrel.2019.04.001&partnerID=40&md5=1a3b0c8d439c58a39b660cb3f9ccfaf0>
- Schwanke, S. et al. (2019): Production of high performance multi-crystalline silicon ingots for PV application by using contamination-free SixNy seed particles. In: Journal of Crystal Growth (Article). DOI: 10.1016/j.jcrysgro.2019.05.030. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85067929349&doi=10.1016%2fj.jcrysgro.2019.05.030&partnerID=40&md5=5c8ec6fa6a3ddc91ae0c254d57b2d094>
- Sledziewski, T. (2019): Process and design optimization of SiC MOSFET for low on-state resistance. (Presentation).
- Sledziewski, T. (2019): SiC MOSFET with a self-aligned channel defined by shallow source-JFET implantation: A simulation study. (Poster).
- Śledziewski, T. et al. (2019): Comparison between NI-SALICIDE and self-aligned lift-off used in fabrication of ohmic contacts for sic power MOSFET. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.490. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071871702&doi=10.4028%2fwww.scientific.net%2fMSF.963.490&partnerID=40&md5=2526bda7fa0b9da2a00fd020d5fb8198>

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Song, Y. et al. (2019): Surface-enhanced Raman scattering on nanodiamond-derived carbon onions. In: Nami Jishu yu Jingmi Gongcheng/Nanotechnology and Precision Engineering (Article). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85072580910&partnerID=40&md5=9922bf3a49763b66ab3123a946b33261>
- Song, Y. et al. (2019): Depth profiling of ion-implanted 4H-SiC using confocal Raman spectroscopy. (Poster).
- Stahr, H. et al. (2019): Investigation of a power module with double sided cooling using a new concept for chip embedding. In: CIPS 2016 - 9th International Conference on Integrated Power Electronics Systems (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073316029&partnerID=40&md5=5c7672ab74fae800bda06899f987736e>
- Stockmeier, L. et al. (2019): Analysis of the geometry of the growth ridges and correlation to the thermal gradient during growth of silicon crystals by the Czochralski-method. In: Journal of Crystal Growth (Article). DOI: 10.1016/j.jcrysgro.2019.03.009. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85062729751&doi=10.1016%2fj.jcrysgro.2019.03.009&partnerID=40&md5=1da4e68365216befa5235aea216bf0d6>
- Strobl, C. et al. (2019): Safety concepts and circuit protection for LVDC-Grids in datacenters and in telecommunications. In: INTELEC, International Telecommunications Energy Conference (Proceedings) (Conference Paper). DOI: 10.1109/INTLEC.2018.8612360. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85061772289&doi=10.1109%2fINTLEC.2018.8612360&partnerID=40&md5=804e314bf4b451f261cf0e30d4ce34a0>
- Tabakoya, T. et al. (2019): High-Rate Growth of Single-Crystalline Diamond (100) Films by Hot-Filament Chemical Vapor Deposition with Tantalum Filaments at 3000 °C. In: Physica Status Solidi (A) Applications and Materials Science (Article). DOI: 10.1002/pssa.201900244. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85069840808&doi=10.1002%2fpssa.201900244&partnerID=40&md5=d4725c1c94b3781bb60673cdb0dbfe48>
- Tao, Y. et al. (2019): Corrigendum to “Particle engulfment dynamics under oscillating crystal growth conditions” [J. Crystal Growth 468 (2017) 24–27](S0022024816306431)(10.1016/j.jcrysgro.2016.10.049). In: Journal of Crystal Growth (Erratum). DOI: 10.1016/j.jcrysgro.2019.05.033. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85066954907&doi=10.1016%2fj.jcrysgro.2019.05.033&partnerID=40&md5=4ca4532b458bbec714aed0e83ec4f9bb>

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Treidel, E.B. et al. (2019): Vertical GaN n-channel MISFETs on ammonothermal GaN substrate: Temperature dependent dynamic switching characteristics. In: Materials Science in Semiconductor Processing (Article). DOI: 10.1016/j.mssp.2018.11.018. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85057115938&doi=10.1016%2fj.mssp.2018.11.018&partnerID=40&md5=ab61e90b8bdd89af6af467d557a26748>
- Trempa, M. et al. (2019): Evaluation of improvement strategies of grain structure properties in high performance multi-crystalline silicon ingots. In: Journal of Crystal Growth (Article). DOI: 10.1016/j.jcrysgro.2019.03.005. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85062531666&doi=10.1016%2fj.jcrysgro.2019.03.005&partnerID=40&md5=2cb84c72ca476edc905605dba183e741>
- Waltrich, U. et al. (2019): Dimensioning of a novel design concept for MMC submodules. In: CIPS 2016 - 9th International Conference on Integrated Power Electronics Systems (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073369582&partnerID=40&md5=d7ef472d1fbc70ec68a3f36fa549200c>
- Watschke, L. et al. (2019): AlGaN avalanche Schottky diodes with high Al-content. In: Japanese Journal of Applied Physics (Article). DOI: 10.7567/1347-4065/ab138f. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85070772166&doi=10.7567%2f1347-4065%2fab138f&partnerID=40&md5=c354038fe72ccce5623427ee5fb88c85>
- Weber, C. et al. (2019): Metallic Interconnection Technologies for High Power Vertical Cavity Surface Emitting Lasers Modules. In: Advanced Structured Materials (Book Chapter). DOI: 10.1007/978-3-030-13307-8_34. Link: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85063725731&doi=10.1007%2f978-3-030-13307-8_34&partnerID=40&md5=c8759f65c89717eaa0f6e5d2e8ab2687
- Weber, C. et al. (2019): Reliability testing of Ag sinter joints. In: ECWC 2014 - 13th Electronic Circuits World Convention: Connecting the World (Conference Paper). Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073563653&partnerID=40&md5=f4efba25b822f6566ab5ec5fc2d95949>
- Weinrich, J. et al. (2019): Extra half-plane shortening of dislocations as an origin of tensile strain in Si-doped (Al)GaN. In: Journal of Applied Physics (Article). DOI: 10.1063/1.5111664. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071322572&doi=10.1063%2f1.5111664&partnerID=40&md5=917b3b20d06a78a41acf3c1f55ebd2af>

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Weisse, J. et al. (2019): On the origin of charge compensation in aluminum-implanted n-type 4H-SiC by analysis of hall effect measurements. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.433. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071837840&doi=10.4028%2fwww.scientific.net%2fMSF.963.433&partnerID=40&md5=db88bd6688c893dd2186c014c32f70d6>
- Weiße, J. et al. (2019): Publisher's Note: Aluminum acceptor activation and charge compensation in implanted p-type 4H-SiC (AIP Advances (2019) 9 (055308) DOI: 10.1063/1.5096440). In: AIP Advances (Erratum). DOI: 10.1063/1.5118666. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85068972262&doi=10.1063%2f1.5118666&partnerID=40&md5=eea3589e79b37dc8e499a2eaaa98f4da>
- Weiße, J. et al. (2019): Aluminum acceptor activation and charge compensation in implanted p-type 4H-SiC. In: AIP Advances (Article). DOI: 10.1063/1.5096440. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85065723845&doi=10.1063%2f1.5096440&partnerID=40&md5=b8637794ceb00adbb279a03f0c90f21c>
- Weisse, J. et al. (2019): Design of a 4H-SiC resurf N-LDMOS transistor for high voltage integrated circuits. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.629. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071876398&doi=10.4028%2fwww.scientific.net%2fMSF.963.629&partnerID=40&md5=82e32b32accb86d180d248e8a084a9ed>
- Winterfeld ,H. et al. (2019): A stress sensor based on a silicon field effect transistor comprising a piezoelectric AlN gate dielectric. In: Journal of Materials Science: Materials in Electronics (Article). DOI: 10.1007/s10854-019-01502-x. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85066122897&doi=10.1007%2fs10854-019-01502-x&partnerID=40&md5=1b527bb4f38811642bb9300267397387>
- Wohrmann, M. et al. (2019): Evaluation of WLP dielectrics for high voltage applications. In: Proceedings - Electronic Components and Technology Conference (Conference Paper). DOI: 10.1109/ECTC.2019.00285. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85072291008&doi=10.1109%2fECTC.2019.00285&partnerID=40&md5=9b074f2b41c8a330ec5a2ba0b6550b65>
- Wojaczek, P. et al. (2019): Minimum variance power spectrum based calibration for improved clutter suppression in PCL on moving platforms. In: 2019 IEEE Radar Conference, RadarConf 2019 (Conference Paper). DOI: 10.1109/RADAR.2019.8835522. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85075495110&doi=10.1109%2fRADAR.2019.8835522&partnerID=40&md5=683775219a08d0ab928d898887780b4d>

Publications from the Technology Platform “Power Electronics” of the Research Fab Microelectronics Germany (2019)

- Xu, Z.W. et al. (2019): Raman spectroscopy characterization of ion implanted 4H-SiC and its annealing effects. In: Materials Science Forum (Conference Paper). DOI: 10.4028/www.scientific.net/MSF.963.424. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071872732&doi=10.4028%2fwww.scientific.net%2fMSF.963.424&partnerID=40&md5=f9d41b3f68010ccfa9cc6b417f4bb5fb>
- Yoshikawa, T. et al. (2019): Influence of substrate holder configurations on bias enhanced nucleation area for diamond heteroepitaxy: Toward wafer-scale single-crystalline diamond synthesis. In: Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics (Article). DOI: 10.1116/1.5086020. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85062589243&doi=10.1116%2f1.5086020&partnerID=40&md5=74d0deb91472ddf77ead5fceed41ec04>
- Yu, Z. et al. (2019): Optimization of Ag-Ag Direct Bonding for Wafer-Level Power Electronics Packaging via Design of Experiments. In: 2019 International Conference on Electronics Packaging, ICEP 2019 (Conference Paper). DOI: 10.23919/ICEP.2019.8733496. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85068321597&doi=10.23919%2fICEP.2019.8733496&partnerID=40&md5=2e6a86bdc0cf825b9dee074e873b2767>
- Zimmermann, V. (2019): Corrosion in PE Systems - Environmental Testing, Corrosion Detection and Protection. (Presentation).
- Zoellner, M.H. et al. (2019): Correlation of Optical, Structural, and Compositional Properties with V-Pit Distribution in InGaN/GaN Multiquantum Wells. In: ACS Applied Materials and Interfaces (Article). DOI: 10.1021/acsami.9b04431. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85067881998&doi=10.1021%2facami.9b04431&partnerID=40&md5=b15ae486f7e1ae75330897bdd7a531a5>
- Zschenderlein, U. et al. (2019): Micro bending test on double cantilever beams: A specimen-centred approach to accurate determination of the visco-plastic properties of sintered silver for power electronics applications. In: 2019 20th International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems, EuroSimE 2019 (Conference Paper). DOI: 10.1109/EuroSimE.2019.8724559. Link: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85067524656&doi=10.1109%2fEuroSimE.2019.8724559&partnerID=40&md5=6207f5257001d47a89aa4f1f212af840>