

Publikationen

- (2020): Thermal conductivity measurements of thin films using 3 ω method. In: 7. Tag der Forschung, Deggendorf.
- (2020): Thermal characterization of thin films using FEM simulations. In: 7. Tag der Forschung, Deggendorf.
- (2020): Tensile stress-driven cracking of W fuzz over W crystal under fusion-relevant He ion irradiations. In: Nuclear Fusion, vol. 60, no. 4. DOI: 10.1088/1741-4326/ab71bb.
- (2020): On the Limits of Scanning Thermal Microscopy of Ultrathin Films. In: Materials, vol. 13, no. 3. DOI: 10.3390/ma13030518.
- (2020): Effect of intermittent He/D ion irradiations on W nano-fuzz growth over W targets. In: Vacuum, vol. 173, no. March. DOI: 10.1016/j.vacuum.2019.109146.
- (2019): Thermische Charakterisierung ultradünner Schichten. In: Forschungsbericht 2018/2019 der Technischen Hochschule Deggendorf, Deggendorf.
- (2019): Temperature dependent investigation of hexagonal boron nitride films using scanning thermal microscopy. Poster presentation. In: 6th Nano Today Conference 2019, Lisbon, Portugal.
- (2019): The evolution of He nanobubbles in tungsten under fusion-relevant He ion irradiation conditions. In: Nuclear Fusion, vol. 59, no. 8. DOI: 10.1088/1741-4326/ab2472.
- (2019): Mass loss of pure W, W-Re alloys, and oxide dispersed W under ITER-relevant He ion irradiations. In: Journal of Nuclear Materials, vol. 527. DOI: 10.1016/j.jnucmat.2019.151800.
- (2019): In Situ Observation of Current Generation in ZnO Nanowire Based Nanogenerators Using a CAFM Integrated into an SEM. In: ACS Applied Materials & Interfaces, vol. 11, no. 17, pp. 15183-15188. DOI: 10.1021/acsami.9b00447.
- (2019): Understanding Current Instabilities in Conductive Atomic Force Microscopy. In: Materials, vol. 12, no. 3. DOI: 10.3390/ma12030459.
- (2019): The effect of O₂ impurity on surface morphology of polycrystalline W during low-energy and high-flux He+ irradiation. In: Fusion Engineering and Design, vol. 139, pp. 96-103. DOI: 10.1016/j.fusengdes.2019.01.003.
- (2018): Investigation of Soft Polymer Surfaces using Atomic Force Microscopy and Laser Scanning Microscopy. In: Applied Research Conference (ARC) 2018, Deggendorf.
- (2018): Investigation of Soft Polymer Surfaces using Atomic Force Microscopy and Laser Scanning Microscopy. In: Applied Research Conference 2018.
- (2018): Investigation of Local Thermal Properties of Carbon Fiber / Epoxy Composites by using Scanning Thermal Microscopy. In: Applied Research Conference (ARC) 2018, Deggendorf.
- (2018): Investigation of Local Thermal Properties of Carbon Fiber / Epoxy Composites by using Scanning Thermal Microscopy. In: Applied Research Conference 2018.
- (2018): Surface diffusion and growth of W self-interstitials during low-energy and large-flux H/He ion irradiations of polycrystalline W. In: International Conference on Plasma Surface Interactions in Controlled Fusion Devices, Princeton University, NJ, USA.
- (2018): Evaluation of Topography effects of SThM Measurements on Thin Thermoelectric Films. Poster. In: 4th Ed. Smart Materials and Surfaces - SMS Conference 2018, Venedig, Italien.

- (2018): Advances in Electrical and Thermal Characterization of Surfaces and Thin Films. Invited Talk. In: 4th Ed. Smart Materials and Surfaces - SMS Conference 2018, Venedig, Italien.
- (2018): Protective nanometer films for reliable Cu-Cu connections. Invited Talk. In: IEEE International Reliability Physics Symposium (IRPS), San Francisco, CA, USA.
- (2018): On the Limits of Scalpel AFM for the 3D Electrical Characterization of Nanomaterials. In: Advanced Functional Materials, vol. 28, no. 52. DOI: 10.1002/adfm.201802266.
- (2018): Nanoscale thermal properties of next generation transparent/flexible thermoelectric copper iodide films. Posterpräsentation. In: 5. Tag der Forschung, Deggendorf.
- (2018): Surface damages of polycrystalline W and La₂O₃-doped W induced by high-flux He plasma irradiation. In: Journal of Nuclear Materials, vol. 501, no. April, pp. 275-281.
- (2017): Chapter 3: Fundamentals of CAFM Operation Modes. In: Conductive Atomic Force Microscopy: Applications in Nanomaterials, Weinheim.
- (2017): Nanoscale thermal properties of next generation transparent/flexible thermoelectric copper iodide films. Posterpräsentation. In: 5th Nano Today Conference, Hawaii, USA.
- (2017): Protective nanometer films for reliable Cu-Cu connections. Best Paper Award. In: Proceedings of the 28th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis (ESREF) [25-28 September, 2017; Bordeaux, Frankreich].
- (2017): Transparent flexible thermoelectric material based on non-toxic earth-abundant p-type copper iodide thin film. In: nature COMMUNICATIONS, no. July, pp. 1-7. DOI: 10.1038/ncomms1607.
- (2017): Numerical Study of Hydrodynamic Forces for AFM Operations in Liquid Scanning (Article ID 6286595, 12 pages). In: Scanning, no. Article ID 6286595, pp. 1-12. DOI: 10.1155/2017/6286595.
- (2017): Protective nanometer films for reliable Cu-Cu connections. In: Microelectronics Reliability, vol. 76-77, no. September, pp. 383-389. DOI: 10.1016/j.microrel.2017.07.001.
- (2016): Fabrication of scalable and ultra low power photodetectors with high light/dark current ratios using polycrystalline monolayer MoS₂ sheets. In: Nano Energy, vol. 30, no. December, pp. 494-502. DOI: 10.1016/j.nanoen.2016.10.032.
- (2016): Nanoscale electrical conductivity of laser-sintered Ge nanoparticle layers. In: The 8th International Conference On Technological Advances Of Thin Films and Surface Coatings (ThinFilms 2016), Singapur, Singapur.
- (2016): Nanoscale characterization of laser-sintered Ge nanoparticle layers. In: 2nd International Conference on Functional Integrated nano Systems (nanoFIS), Graz, Österreich.
- (2016): Surface degeneration of W crystal irradiated with low-energy hydrogen ions. In: Scientific Reports (Nature Publishing Group), vol. 6, no. Article number: 23738. DOI: 10.1038/srep23738.
- (2016): High-flux He⁺ irradiation effects on surface damages of tungsten under ITER relevant conditions. In: Journal of Nuclear Materials, vol. 471, no. April, pp. 1-7. DOI: 10.1016/j.jnucmat.2016.01.001.
- (2016): Characterization of the photocurrents generated by the laser of atomic force microscopes. In: Review of Scientific Instruments, vol. 87, no. 8. DOI: 10.1063/1.4960597.
- (2015): Atomic Force Microscopy analysis of laser-sintered Germanium nanoparticles for thermoelectric applications. In: 3rd International Congress on Energy Efficiency and Energy Related Materials (ENEFM), Oludeniz, Türkei.
- (2015): A review of physical characterization methods for nanostructured thermoelectric materials. Invited Talk. In: 3rd International Congress on Energy Efficiency and Energy Related Materials (ENEFM), Oludeniz, Türkei.
- (2015): Nanostructured fuzz growth on tungsten under low-energy and high-flux He irradiation. In: Scientific Reports (Nature Publishing Group), vol. 5, no. Article number: 10959, pp. 1-9. DOI: 10.1038/srep10959.



- (2015): Ordered arrangement of irradiation-induced defects of polycrystalline tungsten irradiated with low-energy hydrogen ions. In: Journal of Nuclear Materials, vol. 464, pp. 216-220.
- (2015): Observation of interstitial loops in He⁺ irradiated W by conductive atomic force microscopy. In: Acta Materialia, vol. 92, pp. 178-188.
- (2015): Nanoscale characterization of CH₃-terminated Self-Assembled Monolayer on copper by advanced scanning probe microscopy techniques. In: Applied Surface Science, vol. 356, pp. 921-926. DOI: 10.1016/j.apsusc.2015.08.182.
- (2015): Differential 3 ω method for measuring thermal conductivity of AlN and Si₃N₄ thin films. In: Thin Solid Films, vol. 591 Part B, pp. 267-270. DOI: 10.1016/j.tsf.2015.03.031.
- (2015): Use of Coated-Metal Particles in Rear Busbar Pastes to Reduce Silver Consumption. In: IEEE Journal of Photovoltaics, vol. 5, no. 2, pp. 534-537. DOI: 10.1109/JPHOTOV.2014.2388080.
- (2015): Nanoscale characterization of copper oxide films by Kelvin Probe Force Microscopy. In: Thin Solid Films, vol. 584, no. June 2015, pp. 310-315. DOI: 10.1016/j.tsf.2015.01.071.
- (2014): The differential 3 ω method for measuring the thermal conductivity of AlN and Si₃N₄ thin films. In: 16th International Conference on Thin Films (ICTF16), Dubrovnik, Kroatien.
- (2014): Characterization of Self-Assembled Monolayers on Copper by Scanning Probe Microscopy. In: 16th International Conference on Thin Films (ICTF16), Dubrovnik, Kroatien.
- (2014): Nanoscale copper oxide characterization with Kelvin Probe Force Microscopy. Posterpräsentation. In: The 7th International Conference on Technological Advances of Thin Films & Surface Coatings (THINFILMS2014), Chongqing, China.
- (2014): Selected Atomic Force Microscopy Methods for the Electrical Characterization of Thin Films and Devices. Invited Talk. In: 4th International Advances in Applied Physics and Materials Science Congress & Exhibition (APMAS), Fethiye, Türkei.
- (2013): Raster-Sonden-Mikroskopie. Analyseverfahren für die Halbleiterelektronik. In: Elektrotechnik und Elektronik in Bayern, München.
- (2013): Determining the thermal conductivity of thin layers with the macroscopic 3 ω method. In: Applied Research Conference (ARC), Deggendorf.
- (2013): Scanning probe microscopy based electrical characterization of thin dielectric and organic semiconductor films. In: 24th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis (ESREF), Arcachon, Frankreich.
- (2013): Scanning probe microscopy based electrical characterization of thin dielectric and organic semiconductor films. In: Microelectronics Reliability, vol. 53, no. 9-11, pp. 1430-1433.
- (2013): Analysis of crystal defects on GaN based semiconductors with advanced scanning probe microscope technique. In: Thin Solid Films, vol. 544, no. Oktober, pp. 139-143.
- (2012): Analysis of copper oxide films by combined scanning microscopy. In: 6th International Conference on Technological Advances of Thin Films & Surface Coatings (THINFILMS2012), Singapur, Singapur.
- (2012): Analysis of crystal defects on GaN-based semiconductors with advanced scanning probe microscope techniques. Invited Talk. In: 6th International Conference on Technological Advances of Thin Films & Surface Coatings (THINFILMS2012), Singapur, Singapur.
- (2012): Characteristics of diode laser structures on silicon substrates based on the Ga(NAsP)/(BGa)(AsP) materials combination. In: Photonics West, San Francisco, CA, USA.
- (2011): Degradation of polycrystalline HfO₂ based gate dielectrics under nanoscale electrical stress. In: Applied Physics Letters, vol. 99.



- (2011): Nanoscale and Device Level Gate Conduction Variability of High-k Dielectrics-Based Metal-Oxide-Semiconductor Structures. In: IEEE Transactions on Device and Materials Reliability, vol. 11, no. September, pp. 495-501. DOI: 10.1109/TDMR.2011.2161087.
- (2011): Reliability and gate conduction variability of HfO₂-based MOS devices: A combined nanoscale and device level study. In: Microelectronic Engineering, vol. 88, pp. 1334-1337.
- (2011): Novel Scanning Capacitance Microscopy Techniques for Device and Thin Film Characterization.
- (2011): Capacitance and Conductivity Mapping of Organic Films and Devices with Non-Contact SPM Methods. In: International Workshop on Scanning Probe Microscopy for Energy Applications, Mainz.
- (2011): Conductivity and Charge Trapping After Electrical Stress in Amorphous and Polycrystalline Al₂O₃-Based Devices Studied With AFM-Related Techniques. In: IEEE Transactions on Nanotechnology, vol. 10, no. 2, pp. 344-351.
- (2011): New Trends in Electrical Scanning Probe Microscopy Techniques for Device and Thin Film Characterization.
- (2010): Intermittent-Contact Capacitance Spectroscopy – A new method for determining C(V) curves with sub-micron lateral resolution. In: Microelectronics Reliability, vol. 50, pp. 1511-1513.
- (2010): Comparison of fluorocarbon film deposition by pulsed/continuous wave and downstream radio frequency plasmas. In: Vacuum, vol. 85, no. 2, pp. 253-262.
- (2010): Plasma-assisted chemical vapor deposition of titanium oxide films by dielectric barrier discharge. Submitted Article. In: Thin Solid Films.
- (2010): Method and apparatus for two-dimensional profiling of doping profiles of a material sample with scanning capacitance microscope.
- (2010): Displacement Current Sensor for two-dimensional dopant profiling. In: ITG Discussion, Grainau.
- (2010): Intermittent-Contact Scanning Capacitance Analysis of Thin Dielectric Films and Semiconductor Devices. Invited Talk. In: 5th International Conference on Technological Advances of Thin Films & Surface Coatings, Harbin, China.
- (2009): A Review of Advanced Scanning Probe Microscope Analysis of Functional Films and Semiconductor Devices. In: Thin Solid Films, vol. 517, no. 17, pp. 5100-5105.
- (2009): Crystallization and silicon diffusion nanoscale effects on the electrical properties of Al₂O₃ based devices. In: Microelectronic Engineering, vol. 86, no. 7-9, pp. 1921-1924.
- (2009): Surface properties of silicon oxide films deposited using low pressure dielectric discharge. In: Applied Surface Science, vol. 255, no. 17, pp. 7708-7712.
- (2009): Displacement current sensor for contact and intermittent contact scanning capacitance microscopy. In: Microelectronics Reliability, vol. 49, no. 1, pp. 1192-1195.
- (2009): Crystallization and Silicon Diffusion Nanoscale Effects on the Electrical Properties of Al₂O₃ Based Devices. In: Conference of Insulating Films on semiconductors (INFOS 2009), Cambridge, Großbritannien.
- (2008): A Review of Advanced Scanning Probe Microscope Analysis of Functional Films and Semiconductor Devices. Invited Talk. In: Thin Films, Singapur.
- (2008): Intermittent-contact scanning capacitance microscopy versus contact mode SCM applied to 2D dopant profiling. In: Microelectronics Reliability, vol. 48 (8-9), pp. 1339-1349.
- (2008): Scanning Probe Microscopy: Analyses for Opto Semiconductors and Outlook. In: Science & Coffee, Regensburg.
- (2008): Raster-Sonden-Mikroskopie an Laser Heterostrukturen. In: BMBF / VDI Fachprogramm „Optische Technologien“, Kick-Off Meeting, Regensburg.



(2007): C-AFM-based thickness determination of thin and ultra-thin SiO₂ films by use of different conductive-coated probe tips. In: Applied Surface Science, vol. 253, no. 7, pp. 3615-3626.

(2007): Advanced Methods in Scanning Probe Microscopy (SPM).

(2007): Influence of the manufacturing process on the electrical properties of thin (< 4 nm) Hafnium based high-k stacks observed with CAFM. In: 18th European Symposium on Reliability of Electronic Devices, Failure Physics and Analysis (ESREF), Arcachon, Frankreich.

(2007): Combined AFM-SEM Study of the Diamond Nucleation Layer on Ir(001). In: Diamond and Related Materials, vol. 16, no. 4, pp. 665-670.

(2007): Influence of the manufacturing process on the electrical properties of thin (< 4 nm) Hafnium based high-k stacks observed with CAFM. In: Microelectronics Reliability, vol. 47, no. 9, pp. 1424-1428.

(2006): Raster-Sonden-Mikroskopie (SPM) in der Fehler- und Zuverlässigkeitsanalytik. In: VDE Fehlermechanismen bei kleinen Geometrien, Grainau.

(2006): Kelvin Probe Force Microscopy – An appropriate tool for the electrical characterisation of LED heterostructures. In: 17th European Symposium - Reliability of Electron Devices, Failure Physics and Analysis (ESREF) 2006, Wuppertal.

(2006): Intermittent contact scanning capacitance microscopy – An improved method for 2D doping profiling. In: Nanotech Northern Europe, Helsinki, Finland.

(2006): Kelvin Probe Force Microscopy – An appropriate tool for the electrical characterisation of LED heterostructures. In: Nanotech Northern Europe, Helsinki, Finland.

(2006): Combined AFM-SEM Study of the Diamond Nucleation Layer on Ir(001). In: 17th European Conference on Diamond, Diamond-Like Materials, Carbon Nanotubes and Nitrides, Estoril, Portugal.

(2006): Surface and electron emission properties of hydrogen-free diamond-like carbon films investigated by atomic force microscopy. In: Materials Science & Engineering A, vol. 426, no. 1-2, pp. 114-120.

(2006): Thickness determination of thin and ultra-thin SiO₂ films by C-AFM IV-spectroscopy. In: Applied Surface Science, vol. 252, no. 6, pp. 2375-2388.

(2006): Properties and deposition processes of a-C: H films from CH₄/Ar dielectric barrier discharge plasmas. In: Surface & Coatings Technology, vol. 200, no. 20-21, pp. 5819-5822.

(2006): Kelvin Probe Force Microscopy – An appropriate tool for the electrical characterisation of LED heterostructures. In: Microelectronics Reliability, vol. 46, no. 9-11, pp. 1736-1740.

(2006): Nanoscale electron field emissions from the bare, hydrogenated and graphite-like layer covered tetrahedral amorphous carbon films. In: Journal of Applied Physics, vol. 99, no. 4. DOI: 10.1063/1.2171806.

(2005): Intermittent Contact Scanning Capacitance Microscopy-First Results. In: Workshop on Scanning Probe Microscopy and Related Techniques, Villach, Österreich.

(2005): Advanced Atomic Force Microscopy Techniques for Nano-Scale Analysis. In: 1st Conference of Micro- and Nanotechnology, Wien, Österreich.

(2005): Intermittent contact scanning capacitance microscopy-A novel method for 2D doping profiling. In: 16th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis (ESREF), Arcachon, Frankreich.

(2005): A triangular section magnetic solenoid filter for removal of macro- and nano-particles from pulsed graphite cathodic vacuum arc plasmas. In: Surface & Coatings Technology, vol. 200, no. 7, pp. 2243-2248. DOI: 10.1016/j.surfcoat.2004.09.032.

(2005): Growth processes and surface properties of diamondlike carbon films. In: Journal of Applied Physics, vol. 97. DOI: 10.1063/1.1890446.



- (2005): Intermittent contact scanning capacitance microscopy-A novel method for 2D doping profiling. In: Microelectronics Reliability, vol. 45, pp. 1568-1571.
- (2005): Conducting atomic force microscopy for nanoscale electron emissions from various diamond-like carbon films. In: Applied Surface Science, vol. 249, no. 1-4, pp. 315-321. DOI: 10.1016/j.apsusc.2004.12.029.
- (2004): Raster Sondenmikroskopie in der Mikro- und Nanoelektronik. In: Elektrotechnik und Elektronik in Bayern 2004.
- (2004): Comparison of bulk and surface structure in a-C:H films. In: International Conference on Plasma Surface Engineering (PSE2004), Garmisch-Partenkirchen.
- (2004): Surface properties and growth of diamond-like carbon films prepared using CVD and PVD methods. In: E-MRS 2004, Strasbourg, Frankreich.
- (2004): Failure analysis of deep sub-micron semiconductor structures and thin films with atomic force microscopy methods. In: First International conference on Engineering Failure Analysis (ICEFA), Lissabon, Portugal.
- (2004): New Trends in the application of scanning probe techniques in failure analysis. In: 15th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis (ESREF), Zürich, Schweiz.
- (2004): AFM-based scanning capacitance techniques for deep sub-micron semiconductor failure analysis. In: 15th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis (ESREF), Zürich, Schweiz.
- (2004): Simplified tunnelling current calculation for MOS structures with ultra-thin oxides for Conductive Atomic Force Microscopy investigations. In: Materials Science & Engineering B, vol. 116, no. 2, pp. 168-174. DOI: 10.1016/j.mseb.2004.09.027.
- (2004): AFM-based scanning capacitance techniques for deep sub-micron semiconductor failure analysis. In: Microelectronics Reliability, vol. 44, no. 9-11, pp. 1615-1619. DOI: 10.1016/j.microrel.2004.07.079.
- (2004): Effect of pressure on the deposition of hydrogen-free amorphous carbon and carbon nitride films by the pulsed cathodic arc discharge method. In: Journal of Vacuum Science & Technology A, vol. 22. DOI: 10.1116/1.1798691.
- (2004): New Trends in the application of scanning probe techniques in failure analysis. In: Microelectronics Reliability, vol. 44, no. 9-11, pp. 1541-1546. DOI: 10.1016/j.microrel.2004.07.037.
- (2004): Filtered pulsed carbon cathodic arc: plasma and amorphous carbon properties. In: Journal of Applied Physics, vol. 95, pp. 7624-7631. DOI: 10.1063/1.1753081.
- (2004): Raster Sondenmikroskopie in der Mikro- und Nanoelektronik. In: 1. Elektrotechnik und Elektronik in Bayern.
- (2003): Atomic Force Microscopy Studies of Thin and Ultra-Thin SiO₂ Films and Interfaces.
- (2003): Failure Analysis of Deep Sub-Micron Semiconductor Structures.
- (2003): Failure Analysis of Deep Sub-Micron Semiconductor Structures, Presentation held at: Dalian University of Technology.
- (2003): Reliability Analysis of Integrated Circuits in Deep Sub-Micron Technology.
- (2003): Reliability Analysis of Integrated Circuits in Deep Sub-Micron Technology.
- (2003): Failure Analysis of Deep Sub-Micron Semiconductor Structures.
- (2003): Failure Analysis of Deep Sub-Micron Semiconductor Structures.
- (2003): Reliability Analysis of Integrated Circuits in Deep Sub-Micron Technology.
- (2003): Atomic Force Microscopy Studies of Thin and Ultra-thin SiO₂ Films. Final Report. In: 2nd VDE World Microtechnologies Congress, München.



- (2003): Atomic Force Microscopy Studies of Thin and Ultra-Thin SiO₂ Films and Interfaces.
- (2003): Influence of the incident angle of energetic carbon ions on the properties of tetrahedral amorphous carbon (ta-C) films. In: 16th International Symposium on Plasma Chemistry, Taormina, Italien.
- (2003): Advanced Analysis of Thin and Ultrathin SiO₂/Si Interfaces with Combined Atomic Force Microscopy Methods. In: 29th International Symposium for Testing and Failure Analysis, Santa Clara, CA, USA, pp. 406-412.
- (2003): Characterization of thin and ultrathin SiO₂ films and SiO₂/Si interfaces with combined conducting and topographic atomic force microscopy. In: 14th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis (ESREF), Arcachon, Frankreich.
- (2003): UV unterstützter thermischer Oxidationsofen. Präsentation, Kategorie Patente.
- (2003): Verfahren der Rastersondenmikroskopie. Präsentation, Kategorie Patente.
- (2003): Characterization of thin and ultrathin SiO₂ films and SiO₂/Si interfaces with combined conducting and topographic atomic force microscopy. In: Microelectronics Reliability, vol. 43, no. 1, pp. 1465-1470. DOI: 10.1016/S0026-2714(03)00260-9.
- (2003): Surface roughness, mechanical and tribological properties of ultrathin tetrahedral amorphous carbon coatings from atomic force measurements. In: Thin Solid Films, vol. 436, no. 2, pp. 244-249. DOI: 10.1016/S0040-6090(03)00592-3.
- (2003): Medium- to high-pressure plasma deposition of a-C:H films by dielectric barrier discharge. In: New Diamond and Frontier Carbon Technology, vol. 13, no. 4, pp. 191-206.
- (2003): SPM investigation of diamond-like carbon and carbon nitride films. In: Surface & Coatings Technology, vol. 172, no. 2-3, pp. 194-203. DOI: 10.1016/S0257-8972(03)00338-4.
- (2003): Surface roughness, scratch resistance and tribological properties of hydrogenated amorphous carbon coatings prepared by low-pressure dielectric barrier discharge. In: Surface & Coatings Technology, vol. 174-175, no. September /Oktober, pp. 310-315. DOI: 10.1016/S0257-8972(03)00649-2.
- (2003): Surface and structural properties of ultrathin diamond-like carbon coatings. In: Diamond and Related Materials, vol. 12, pp. 1594-1600. DOI: 10.1016/S0925-9635(03)00248-6.
- (2003): A review of ULSI failure analysis techniques for DRAMs , Part II: defect isolation and visualization. Introductory Invited Paper. In: Microelectronics Reliability, vol. 43, pp. 17-41. DOI: 10.1016/S0026-2714(02)00295-0.
- (2003): The effect of the surface layer of tetrahedral amorphous carbon films on their tribological and electron emission properties investigated by atomic force microscopy. In: Applied Physics Letters, vol. 82, pp. 3898-3900. DOI: 10.1063/1.1581367.
- (2003): Influence of the incident angle of energetic carbon ions on the properties of tetrahedral amorphous carbon (ta-C) films. In: Journal of Vacuum Science & Technology A, vol. 21, pp. 1655-1670. DOI: 10.1116/1.1597888.
- (2003): Advanced Analysis of Thin and Ultrathin SiO₂/Si Interfaces with Combined Atomic Force Microscopy Methods. In: 29th International Symposium for Testing and Failure Analysis, Santa Clara, CA, USA, pp. 406-412.
- (2002): Evaluation of thin oxide reliability by means of wafer level stress-testing. In: 8th European Parametric Test User Group Meeting, Prien am Chiemsee.
- (2002): Combined AFM Methods to Improve Reliability Investigations of Thin Oxides. Final Report. In: IEEE International Integrated Reliability Workshop, Lake Tahoe, CA, USA.
- (2002): Conducting Atomic Force Microscopy Studies for Reliability Evaluation of Ultrathin SiO₂ Films. Final Report. In: IEEE International Integrated Reliability Workshop, Lake Tahoe, CA, USA.
- (2002): Comparison of Nanoscale Scratch and Wear Resistance of a-C:H, a-C:N and ta-C Films. In: International Conference on Plasma Surface Engineering (PSE2002), Garmisch-Partenkirchen.

- (2002): Surface Roughness and Mechanical Properties of a-C:H Films Prepared by Low-pressure Dielectric Barrier Discharge. In: International Conference on Plasma Surface Engineering (PSE2002), Garmisch-Partenkirchen.
- (2002): A review of ULSI failure analysis techniques for DRAMs , Part I: defect localization and verification. Introductory Invited Paper. In: Microelectronics Reliability, vol. 42, pp. 307-316. DOI: 10.1016/S0026-2714(02)00002-1.
- (2001): Deposition of a-C:H Films with an ECWR-Reactor at 27 MHz: Plasma Diagnostics and Correlation to Film Properties. In: Surface & Coatings Technology, no. 142-144, pp. 342-347. DOI: 10.1016/S0257-8972(01)01313-5.
- (2000): Technologie-Zuverlässigkeit von Sub-Mikrometer-ICs. In: Seminarvortrag der Lehrstühle für Technische Elektronik und Technische Elektrophysik, München.
- (1999): IC-Ausfälle durch Elektromigration: Zuverlässigkeit metallischer Leitbahnen in ULSI-Technologien. In: F&M Feinwerktechnik Mikrotechnik Mikroelektronik, no. 11.
- (1997): Reliability and Failure Analysis of 64 & 256 Mb DRAM Trench Capacitors. In: GMM-Fachbericht 17, Mikroelektronik 97, München.
- (1997): Schnittstellen für schnelle Halbleiterspeicher. In: Jahrbuch der Elektrotechnik 1998, Berlin; Offenbach.
- (1997): Zuverlässigkeitsanalysen an Sub- Mikrometer CMOS Transistoren. In: QZ - Qualität und Zuverlässigkeit, no. 11 /97, pp. 1264-1267.
- (1997): Zuverlässigkeitsherausforderungen dünner Dielektrika in Sub-Mikrometer ICs. In: F&M Feinwerktechnik Mikrotechnik Mikroelektronik, no. 3, pp. 127-132.
- (1996): Failure Analysis of DRAM Storage Node Trench Capacitors for 0.35-Micron and Follow-On Technologies Using the Focused Ion Beam for Electrical and Physical Analysis. In: Proceedings of the International Symposium for Testing and Failure Analysis.
- (1996): Experimental Observations of Steady Anodic Vacuum Arcs with Hot Cathode. In: IEEE Transactions on Plasma Science, vol. 24, no. 6, pp. 1389-1393.
- (1996): Anodischer Niedervoltbogen als Beschichtungsplasma. In: Journal für Oberflächentechnik (JOT), no. 9, pp. 13-16.
- (1996): Schnittstellen für schnelle Halbleiterspeicher. In: Nachrichtentechnische Zeitschrift (ntz), vol. 49, no. 11, pp. 28-33.
- (1995): Laserstreuung und Entladungsdiagnostik am Beschichtungsplasma eines anodischen Vakuumbogens. In: Fortschritt-Berichte / VDI Fertigungstechnik, Düsseldorf, vol. Nr. 336. ISBN: 3-18-333602-2.
- (1994): Laserinduzierte Fluoreszenz am expandierenden Vakuumbogenplasma. In: Frühjahrstagung der Deutschen Physikalischen Gesellschaft, Erlangen.
- (1994): Abscheidung dünner Metallschichten durch eine neuartige Plasmaentladung. In: Seminarvortrag am Lehrstuhl für Technische Elektrophysik, München.
- (1994): Grundlagen der Laserinduzierten Fluoreszenz. In: Seminarvortrag am Lehrstuhl für Technische Elektrophysik, München.
- (1993): Vergleich von Kalibrierungsmethoden für Laserinduzierte Fluoreszenz (LIF). In: Frühjahrstagung der Deutschen Physikalischen Gesellschaft, Greifswald.

