

# NAMES, DATES, EVENTS



## Granted patents 2016

Burmeister, U.; Huber, J.; Ottmann, N.; Peterhans, S.I.; Wagner, W.; Weiser, C.  
**Fuel cell assembly comprising an improved catalytic burner**  
KR 10-1675255

Ehrt, R.; Johannes, M.  
**Veneering ceramic for dental restorations made of yttrium-stabilized zirconium dioxide and method for applying said veneering ceramic**  
CN 103 080 033 B

Ehrt, R.; Rothe, P.; Seifert, D.; Völger, K.W.  
**Glass-ceramic (LTCC) capable of being assembled with silicon by anodic bonding**  
DE 103 51 196 B4

Endler, I.  
**Hard-coated body and method for production thereof**  
EP 1 902 155 B1

Endler, I.; Höhn, M.  
**Coated bodies made of metal, hard metal, cermet, or ceramic, and method(s) for coating of such bodies**  
DE 10 2009 046 667 B4

Endler, I.; Scholz, S.  
**Hard-material-coated bodies composed of metal, cemented hard material, cermet or ceramic and processes for producing such bodies**  
US 9,309,593 B2; RU 2 588 933 C2; CN 103 987 874 B

Frankenstein, B.; Weihnacht, B.; Rieske, R.; Fischer, D.  
**System for monitoring the condition of rotor blades at wind turbines**  
US 9,239,042

Friedrich, H.-J.; Zaruba, A.  
**Method for recovery of noble metals**  
DE 10 2006 056 017 B4

Goldberg, A.; Marcinkowski, P.; Feller, C.; Wolter, M.  
**Electrochemical cell of an accumulator**  
US 9,391,348 B2

Grzesiak, A.; Weking, C.; Visotschnig, R.; Refle, O.; Kraft, T.; Schäfer, R.; Ziegler, T.; Richter, H.-J.; Heinritz, K.  
**Method for producing a ceramic body**  
DE 10 2011 117 005 B4

Gusek, C.; Eisner, F.; Hülstrung, J.; Jindra, F.; Willeke, B.-H.; Blumenau, M.; Kovac, M.; Jendrischik, G.; Peitz, A.; Schönenberg, R.; Adler, J.; Heymer, H.  
**Device for reducing pressure in hollow bodies in media at higher temperatures**  
CN 103 649 360 B; JP 5980324 B2

Han, T.; Gerich, C.; Zeh, C.; Härtling, T.; Opitz, J.; Schreiber, J.; Lee, S.; Kim, K.; Baik, J.; Kim, E.  
**Prostate cancer diagnosis device using fractal dimension value**  
EP 2 699 159; DE 60 2011 025 155

Härtling, T.; Schuster, C.  
**Verfahren zur Herstellung und Überprüfung von Werkstücken und Werkstück**  
DE 10 2014 117 519 B4

Herzog, T.; Heuer, H.; Engl, G.; Kröning, M.  
**Test head for testing a work-piece having an ultrasonic transducer configuration containing a plurality of ultrasonic transducers and process for producing such a test head**  
US 9,423,382 B2

Hutzler, T.; Krell, A.  
**Transparent spinel ceramics and method for the production**

thereof  
US 9,309,156 B2

Jurk, R.; Eberstein, M.; Reinhardt, K.; Schmidt, U.  
**Method for determining the quality of electric conducting connections between front panel contacts and the semi-conducting layer in silicon wafers for photovoltaics**  
DE 10 2014 226 403 B3

Körner, S.; Eberstein, M.  
**Method for producing a silver-containing glass powder, and use of the glass powder**  
DE 10 2014 221 679 B4

Kriegel, R.; Kircheisen, R.; Ritter, K.  
**Method for the high-temperature-resistant bonding of oxygen-permeable oxide ceramics based on substituted earth-alkaline cobaltates by means of doping-supported diffusive reactive sintering**  
CN 102 574 073 B

Krüger, P.  
**Modular, imaging, large x-ray detector**  
DE 10 2007 045 799 B4

Kunz, W.; Steinborn, C.; Finaske, T.; Brückner, F.

## NAMES, DATES, EVENTS

**Method for producing ceramic fibre composites**  
DE 10 2015 205 595 B3

Lausch, H.; Brand, M.; Andrä, W.; Werner, C.

**Arrangement for non-contact defined movement of at least one magnetic body**  
EP 2 023 814 B1

Lausch, H.; Brand, M.; Werner, C.  
**Arrangement for the touchless generation of defined mechanical, electrical and magnetic impulses**  
EP 2 367 478 B1

Lausch, H.; Wätzig, K.; Kinski, I.  
**Electromagnetic radiation in the UV wavelength range emitting body, method for irradiation with this body and use of the body**  
DE 10 2015 102 427 B3

Luthardt, F.; Adler, J.  
**Method and device for continuous generation of foams**  
DE 10 2010 039 322 B4

Nicolai, J.; Bendjus, B.; Cikalova, U.; Schreiber, J.  
**Method for the contactless, destruction-free determination of inhomogeneities and/or defects on surfaces of components or samples**  
DE 10 2014 224 852 B4

Opitz, J.; Pohl, A.; Schreiber, J.; Quenzel, P.; Boschke, E.; Bley, T.; Pässler, S.; Vonau, W.; Mertig, M.; Lange, A.; Rohayem, J.; Lapina, V.  
**Method and device for detecting an analyte in a sample by means of surface-plasmon resonance (SPR) and electrochemical impedance spectroscopy (EIS)**  
EP 2 594 525 B1

Räthel, J.; Herrmann, M.; Weise, B.  
**Plunger tool for spark-plasma sintering or field activated sintering**  
DE 10 2011 105 413 B4

Reichel, U.; Ludwig, H.; Kemnitz, E.  
**Alpha-Al<sub>2</sub>O<sub>3</sub>- Sintering material, method for producing a high-density and very finely crystalline molded body made of said material, and use thereof**  
DE 10 2009 035 501 B4;  
EP 2 462 080 B1

Stelter, M.; Partsch, U.; Rabbow, T.; Schöne, J.; Goldberg, A.; Wolter, M.  
**Contact element for contacting of an electrical power generating electrochemical cell and method for its producing**  
DE 10 2009 037 144 B4

Stelter, M.; Partsch, U.; Rabbow, T.; Schöne, J.; Goldberg, A.; Wolter, M.  
**Contact element for current consumption and current output in electrical power generating electrochemical cell**  
DE 10 2009 037 147 B4

Trofimenko, N.; Sauchuk, V.; Kusnezoff, M.; Lucke, K.; Michaelis, A.; Brandner, M.; Schmid, J.; Venskutonis, A.  
**Layer structure and use thereof to form a ceramic layer structure between an interconnect and a cathode of a high-temperature fuel cell**  
US 9,337,497 B2; EP 2 676 318 B1; CN 103 403 938 B; JP 600 444 8 B2

Zeh, C.; Härtling, T.  
**Verfahren zur Markierung von Werkstücken und Werkstück**  
DE 10 2015 107 744 B3

### Patent applications 2016

Adler, J.; Standke, G.; Haase, D.  
**Zirconium oxide ceramic, cellular material from this and method for production of zirconium oxide ceramic**

Cikalova, U.; Bendjus, B.; Schott, C.; Steingoeser, J.  
**Laseroptisches Sensorsystem zur nichtinvasiven Biomassecharakterisierung in biotechnologischen Prozessen**

Friedrich, H.-J.; Hielscher, M.; Hinrichs, T.; Rott, H.-J.  
**Method for treatment of geothermal fluids or formation waters by continuous electrochemical separation of reducible metal-ions or metalloide-ions from the delivery stream**

Gluch, J.; Kopycinska-Müller, M.; Rabe, U.; Köhler, B.  
**Procedure for calibration of AFM tip for quantitative determination of indentation modulus of materials on nanoscale**

Goldberg, A.; Partsch, U.; Ziesche, S.  
**Valve from a ceramic material and method for its production**

Grund, M.; Weidl, R.; Schulz, M.  
**Sodium ions conducting membrane based on sodium-betaaluminate system and method for its production**

Härtling, T.  
**Verfahren zur Rückverfolgung der Temperaturhistorie von Produkten und Baugruppen**

Hofacker, M.; Kiesel, L.  
**Extrusion method and device for extrusion for production of a ceramic tube with sealed bottom**

Joneit, D.  
**Auswerteverfahren für digitalisierte Schwingungspakete zur Impedanzmessung**

Krüger, P.; Hillmann, S.; Brosius, D.  
**Application of x-ray backscatter-**

**ing radiography and tomography in additive manufacturing**

Krüger, P.; Schulze, M.; Hillmann, S.  
**A method to evaluate images of fibrous tissues based on eddy current measurements**

Kusnezoff, M.; Dietrich, S.  
**Gas-sensitive sensor-element**

Meier, K.; Röllig, M.; Schingale, A.; Ochs, M.  
**Verbindungstechnologie für mehrlagige Leiterplatten**

Rebenklau, L.; Wodtke, A.; Augsburg, K.; Irrgang, K.; Lippmann, L.; Bechtold, F.; Köhler, P.  
**Ring-shaped sealing element with integrated thermo-elements**

Reichel, U.; Kemnitz, E.; Krahl, T.  
**Method for producing poly-crystalline transparent shaped parts**

Richter, H.; Simon, A.; Jüttke, Y.; Schwieger, W.; Schüle, M.; Lüdke, D.; Reif, B.  
**Permeation membrane and method for production a permeation membrane**

Scheithauer, U.; Aneziris, C.  
**Particle from a refractory ceramic material for influencing the damage tolerance of high temperature materials and method for its production**

Scheithauer, U.; Aneziris, C.  
**Particle from a refractory ceramic material for influencing the crack formation in high temperature materials and method for its production**

Scheunert, G.; Härtling, T.; Wuchrer, R.  
**Berechnungsindex-Sensor auf Basis plasmonischer Substrate für Flüssigkeiten im Automotivebereich zur Echtzeitsteuerung eines Regelkreises**

Schulze, E.  
**Bifunctional polyacrylamide-free flocculation agents and method for its production**

Schwarzer, E.; Kelemen, M.; Scheithauer, U.; Moritz, T.; Markova, D.  
**Ceramic suspension**

Schwarzer, E.; Moritz, T.  
**Mouldable ceramic and/or powder-metallurgical green tapes and method for moulding this ceramic and/or powder-metallurgical green tapes**

Trofimenko, N.; Kusnezoff, M.  
**Anode for an electrochemical cell and method for production of an electrochemical cell with such anode**

Trofimenko, N.; Lucke, K.; Kusnezoff, M.

**Past-like composition and method for production of three-dimensional structures or structure elements on substrate surfaces**

Vogel, A.; Pippardt, U.; Hoffmann, R.; Jäger, B.  
**Method for dry coating of supports**

Wolter, M.; Schilm, J.; Nikolowski, K.; Kusnezoff, M.  
**Composite-cathode layer arrangement for lithium based, solid state body batteries and method for its production**

Wolter, M.; Schilm, J.; Nikolowski, K.; Kusnezoff, M.; Partsch, U.; Freytag, C.  
**Method for production of an electrochemical cell and an electrochemical cell produced with this method**

Zeh, C.; Härtling, T.  
**Manufacturing method for sensing element and sensor device**

Ziesche, S.; Ihle, M.; Hirsch, O.; Tuor, A.  
**Manufacturing method for sensing element and sensor device**

Ziesche, S.; Lenz, C.; Kuipers, W.; Deilmann, M.  
**Device for detection of organic compounds**

### Books and periodical contributions

Adler, J.; Kriegel, R.; Petasch, U.; Richter, H.; Voigt, I.; Weyd, M.  
**Keramik für Filtrationsanwendungen**  
Keramische Zeitschrift 68(2016), Nr.3, p.172–178

Ahlhelm, M.  
**Gefrierschäume – Entwicklung von zellularen Strukturen für vielfältige Anwendungen**  
Stuttgart: Fraunhofer Verlag, 2016, 191 p.  
(Zugl.: Clausthal, TU, Diss., 2015)  
(Kompetenzen in Keramik. Schriftenreihe, 32)  
ISBN 978-3-8396-0977-4

Ahlhelm, M.; Günther, P.; Scheithauer, U.; Schwarzer, E.; Günther, A.; Slawik, T.; Moritz, T.; Michaelis, A.  
**Innovative and novel manufacturing methods of ceramics and metal-ceramic composites for biomedical applications**  
Journal of the European Ceramic Society 36(2016), Nr.12, p.2883–2888

Bansal, N.P.(Ed.); Kusnezoff, M.(Ed.); Shimamura, K.(Ed.); American Ceramic Society -ACerS-, Westerville/Ohio

- Advances in solid oxide fuel cells and electronic ceramics**  
Hoboken/NJ: Wiley, 2016, 188 p.  
Ceramic engineering and science proceedings 36(2015), Nr.3  
ISBN 978-1-119-21149-5;  
ISBN 978-1-119-21150-1
- Bardl, G.; Nocke, A.; Cherif, C.; Pooch, M.; Schulze, M.H.; Heuer, H.; Schiller, M.; Kupke, R.; Klein, M.  
**Automated detection of yarn orientation in 3D-draped carbon fiber fabrics and preforms from eddy current data**  
Composites. Part B, Engineering 96 (2016), p.312–324
- Bardl, G.; Weise, D.; Nocke, A.; Cherif, C.; Pooch, M.; Schulze, M.; Heuer, H.; Schiller, M.  
**Automatische 3D-Draperanalyse und Fadenrichtungsbestimmung für technische Textilien**  
Technische Textilien 59(2016), Nr.4, p.172–174
- Berger, L.-M.; Trache, R.; Toma, F.-L.; Thiele, S.; Norpoth, J.; Janka, L.  
**Entwicklung wirtschaftlich effizienter Hartmetallbeschichtungs-lösungen für Hochtemperaturanwendungen. Teil 2: Einfluss von Wärmebehandlungen und tribologische Untersuchungen**  
Thermal Spray Bulletin (2016), Nr.9, p.45–53
- Bierlich, S.; Reimann, T.; Barth, S.; Capraro, B.; Bartsch, H.; Müller, J.; Töpfer, J.  
**Integration of high-frequency M-type hexagonal ferrite inductors in LTCC multilayer modules**  
International Journal of Applied Ceramic Technology 13(2016), Nr.3, p.540–548
- Blumenthal, P.; Molin, C.; Gebhardt, S.; Raatz, A.  
**Active electrocaloric demonstrator for direct comparison of PMN-PT bulk and multilayer samples**  
Ferroelectrics 497(2016), p.1–8
- Bollelli, G.; Berger, L.-M.; Börner, T.; Koivuluoto, H.; Matikainen, V.; Lusvarghi, L.; Lyphout, C.; Markocsan, N.; Nylén, P.E.; Sassatelli, P.; Trache, R.; Vuoristo, P.  
**Sliding and abrasive wear behaviour of HVOF- and HVOF-sprayed Cr<sub>3</sub>C<sub>2</sub>-NiCr hardmetal coatings**  
Wear 358–359(2016), p.32–50
- Cid, A.G.; Rosenkranz, R.; Zschech, E.  
**Optimization of the SEM working conditions: EsB detector at low voltage**  
Advanced Engineering Materials 18(2016), Nr.2, p.185–193
- Clausner, A.; Richter, F.  
**Fundamental limitations at the determination of initial yield stress using nano-indentation with spherical tips**  
European Journal of Mechanics. A, Solids 58(2016), p.69–75
- Cornelius, S.; Vinnichenko, M.  
**Al in ZnO – from doping to alloying. An investigation of Al electrical activation in relation to structure and charge transport limits**  
Thin Solid Films 605(2016), p.20–29
- Eckhard, S.; Fries, M.; Antonyuk, S.; Heinrich, S.  
**Dependencies between internal structure and mechanical properties of spray dried granules – experimental study and DEM simulation**  
Advanced Powder Technology (2016), Online First, 12 p.
- Eldawud, R.; Reitzig, M.; Opitz, J.; Rojansakul, Y.; Jiang, W.; Nangia, S.; Dinu, C.Z.  
**Combinatorial approaches to evaluate nanodiamond uptake and induced cellular fate**  
Nanotechnology 27(2016), Nr.8, Art. 085107, 11 p.
- Engelhardt, S.; Mietschke, M.; Molin, C.; Gebhardt, S.; Fähler, S.; Nielsch, K.; Hühne, R.  
**Structural and ferroelectric properties of epitaxial BaZr<sub>x</sub>Ti<sub>1-x</sub>O<sub>3</sub> thin films**  
Journal of Physics. D: Applied Physics 49(2016), Nr.49, Art. 495303, 7 p.
- Faßbauer, B.  
**Autartec®-Systeme zur dezentralen Wasseraufbereitung**  
GWF. Wasser, Abwasser 157(2016), Nr.6, p.587–588
- Feller, C.; Seuthe, T.; Eberstein, M.  
**Dickschicht-Messwiderstände mit minimiertem Temperaturkoeffizienten für Präzisionssensoren zur Bestimmung der Einspeiseleistung dezentraler Energieerzeuger**  
Keramische Zeitschrift 68(2016), Nr.4/5, p.238–244
- Feng, Bing  
**Herstellung, Modifizierung und Charakterisierung von borcarbid-basierten Keramiken als Thermoelektrikum**  
Stuttgart: Fraunhofer Verlag, 2016, V, 145 p.  
(Zugl.: Dresden, TU, Diss., 2016)  
(Kompetenzen in Keramik. Schriftenreihe, 33)  
ISBN 978-3-8396-1007-7
- Fu, J.; Pang, R.; Jiang, L.; Jia, Y.; Sun, W.; Zhang, S.; Li, C.  
**A novel dichromic self-referencing optical probe SrO:Bi(3+),Eu(3+) for temperature spatially and temporally imaging**  
Dalton Transactions 45(2016), Nr.34, p.13317–13323
- Fu, J.; Zhang, S.; Pang, R.; Jia, Y.; Sun, W.; Li, H.; Jiang, L.; Li, C.  
**Material and ingenious synthesis strategy for short-wavelength infrared light-emitting device**  
Inorganic Chemistry 55(2016), Nr.21, p.11258–11263
- Fuhrmann, K.; Neumeister, P.; Eulitz, K.-G.  
**Optimisation methods for the determination of cyclic material parameters from strain controlled uniaxial fatigue tests**  
International Journal of Fatigue 83(2016), Part 2, p.93–99
- Gago, R.; Vinnichenko, M.; Hübner, R.; Redondo-Cubero, A.  
**Bonding structure and morphology of chromium oxide films grown by pulsed-DC reactive magnetron sputter deposition**  
Journal of Alloys and Compounds 672(2016), p.529–535
- Garitagoitia, M.A.; Moayed, E.; Rosenkranz, R.; Clausner, A.; Pakbaz, K.; Zschech, E.  
**Non-destructive imaging of organosilicate glass (OSG) thin films at low voltage with the EsB detector**  
IEEE Transactions on Device and Materials Reliability 16(2016), Nr.4, p.461–464
- Garitagoitia, M.A.; Sedighi, M.; Löffler, M.; van Dorp, W.F.; Zschech, E.  
**Energy-filtered backscattered imaging using low-voltage scanning electron microscopy: Characterizing blends of ZnPc-C<sub>60</sub> for organic solar cells**  
Advanced Engineering Materials 18(2016), Nr.6, p.913–917
- Gestrich, T.; Kaiser, A.; Meinel, J.; Schilm, J.; Linsels, F.; Seibt, S.; Gollner, M.  
**Aktivlöten von Keramik: Erhitzungsmikroskopie und komplexe thermische Analyse in hochreinen Atmosphären**  
Keramische Zeitschrift 68(2016), Nr.4/5, p.245–248
- Gestrich, Tim  
**Thermische Analysen und Bestimmungen thermophysikalischer Eigenschaften von Materialien und Bauteilen**  
Pulvermetallurgie in Wissenschaft und Praxis 32(2016), p.339–341
- Giuntini, D.; Räthel, J.; Herrmann, M.; Michaelis, A.; Haines, C.D.; Olevsky, E.A.  
**Spark plasma sintering novel tooling design: Temperature uniformization during consolidation of silicon nitride powder**  
Journal of the Ceramic Society of Japan 124(2016), Nr.4, p.403–414
- Glöb, B.; Fries, M.  
**A method for analysing the die filling behaviour of ceramic granules**  
cfi – ceramic forum international 93(2016), Nr.10, p.E38–E43
- Goldstein, A.; Krell, A.  
**Transparent ceramics at 50: Progress made and further prospects**  
Journal of the American Ceramic Society 99(2016), Nr.10, p.3173–3197
- Goldstein, A.; Räthel, J.; Katz, M.; Berlin, M.; Galun, E.  
**Transparent MgAl<sub>2</sub>O<sub>4</sub>/LiF ceramics by hot-pressing: Host-additive interaction mechanisms issue revisited**  
Journal of the European Ceramic Society 36(2016), Nr.7, p.1731–1742
- Gommlich, A.  
**Entwicklung einer neuen Methode zur Ansteuerung von Ultraschall-Phased Arrays**  
Dresden: TUDpress, 2016, XVII, 103 p.  
(Zugl.: Dresden, TU, Diss., 2016)  
ISBN 978-3-95908-063-7
- Gonzales-Julian, J.; Jähnert, K.; Speer, K.; Liu, L.; Räthel, J.; Knapp, M.; Ehrenberg, H.; Bram, M.; Guillon, O.  
**Effect of internal current flow during the sintering of zirconium diboride by field assisted sintering technology**  
Journal of the American Ceramic Society 99(2016), Nr.1, p.35–42
- Gradmann, R.; Seuthe, T.; Vedder, C.; Eberstein, M.; Partsch, U.  
**Adaption of functional ceramic materials for the laser sintering process in integrated sensor applications**  
IMAPS Additional Conferences (Device Packaging, HiTEC, HiTEN, & CICMT). Online journal (2016), p.000011–000017
- Hallmann, L.; Ulmer, P.; Lehmann, F.; Wille, S.; Polonsky, O.; Johannes, M.; Köbel, S.; Trottenberg, T.; Bornholdt, S.; Haase, F.; Kersten, H.; Kern, M.  
**Effect of surface modifications on the bond strength of zirconia ceramic with resin cement resin**  
Dental Materials 32(2016), Nr.5, p.631–639
- Härtel, A.; Scheithauer, U.; Schwarzer, E.; Weingarten, S.; Slawik, T.; Richter, H.-J.; Moritz, T.  
**Additive Herstellung mehrkomponentiger metallischer und keramischer Bauteile mittels thermoplastischen 3D-Druckes (T3DP)**  
Keramische Zeitschrift 68(2016), Nr.1, p.43–47
- Hennicke, J.; Herrmann, M.; Kessel, T.; Räthel, J.  
**FAST/Flash eröffnet neue Perspektiven für die industrielle Anwendung des feldunterstützten Sinterns**  
cfi – ceramic forum international 93(2016), Nr.10, p.D12–D15
- Heubner, C.  
**Thermisch-elektrochemische in-operando Untersuchungen zur**

## NAMES, DATES, EVENTS

- lokalen Wärmeentwicklung in Lithiumionenbatteriezellen**  
Stuttgart: Fraunhofer Verlag, 2016, XV, 161 p.  
(Zugl.: Dresden, TU, Diss., 2015)  
(Kompetenzen in Keramik. Schriftenreihe, 35)  
ISBN 978-3-8396-1075-6
- Heubner, C.; Schneider, M.; Michaelis, A.  
**SoC dependent kinetic parameters of insertion electrodes from Stair-Case – GITT**  
Journal of Electroanalytical Chemistry 767(2016), p.18–23
- Heubner, C.; Schneider, M.; Michaelis, A.  
**Detailed study of heat generation in porous LiCoO<sub>2</sub> electrodes**  
Journal of Power Sources 307(2016), p.199–207
- Heubner, C.; Heiden, S.; Matthey, B.; Schneider, M.; Michaelis, A.  
**Sodiation vs. Lithiation of FePO<sub>4</sub>: A comparative kinetic study**  
Electrochimica Acta 216(2016), p.412–419
- Hillmann, S.; Schubert, F.; Brosius, D.M.; Bor, Z.  
**Validation of an ultrasonic-phased array method for testing of circumferential welds at thin-walled pipes**  
NDT World 19(2016), Nr.3, p.30–33
- Huang, J.; Löffler, M.; Möller, W.; Zschech, E.  
**Ga contamination in silicon by focused ion beam milling: Dynamic model simulation and atom probe tomography experiment**  
Microelectronics Reliability 64(2016), p.390–392
- Janka, L.; Norpoth, J.; Trache, R.; Berger, L.-M.  
**Influence of heat treatment on the abrasive wear resistance of a Cr<sub>3</sub>C<sub>2</sub>-NiCr coating deposited by an ethene-fuelled HVOF spray process**  
Surface and Coatings Technology 291(2016), p.444–451
- Jemec, A.; Kahru, A.; Potthoff, A.; Drobne, D.; Heinlaan, M.; Böhme, S.; Geppert, M.; Novak, S.; Schirmer, K.; Rekulapally, R.; Singh, S.; Aruoja, V.; Sihtmäe, M.; Juganson, K.; Käkinen, A.; Kühnel, D.  
**An interlaboratory comparison of nanosilver characterisation and hazard identification: Harmonising techniques for high quality data**  
Environment International 87(2016), p.20–32
- Johnen, S.; Meißner, F.; Krug, M.; Baltz, T.; Endler, I.; Mokwa, W.; Walter, P.M.  
**Properties of retinal precursor cells grown on vertically aligned multiwalled carbon nanotubes generated for the modification of retinal implant-embedded**
- microelectrode arrays**  
Journal of Ophthalmology (2016), Art. 2371021, 13 p.
- Kappes, W.; Hentschel, D.; Oelschlägel, T.  
**Potential improvements of the presently applied in-service inspection of wheelset axles**  
International Journal of Fatigue 86(2016), p.64–76
- Khazaei, M.; Majumder, A.; Baraban, L.; Cuniberti, G.; Opitz, J.; Ye, D.  
**Non-covalent modified multi-walled carbon nanotubes: Dispersion capabilities and interactions with bacteria**  
Biomedical Physics & Engineering Express 2(2016), Nr.5, Art. 055008, 8 p.
- Kiebach, R.; Engelbrecht, K.L.; Kwok, K.; Molin, S.M.; Søgaard, M.; Niehoff, P.; Schulze-Küppers, F.; Kriegel, R.; Kluge, J.; Hendriksen, P.V.  
**Joining of ceramic Ba<sub>0.5</sub>Sr<sub>0.5</sub>Co<sub>0.8</sub>Fe<sub>0.2</sub>O<sub>3</sub> membranes for oxygen production to high temperature alloys**  
Journal of Membrane Science 506(2016), p.11–21
- Kim, H.S.; Han, T.-Y.; Yoo, Y.-M.  
**Melatonin-mediated intracellular insulin during 2-deoxy-D-glucose treatment is reduced through autophagy and EDC3 protein in insulinoma INS-1E cells**  
Oxidative Medicine and Cellular Longevity 2016(2016), Art. 2594703, 11 p.
- Kirsten, M.; Meinel, J.; Schönfeld, K.; Michaelis, A.; Cherif, C.  
**Characteristics of wet-spun and thermally treated poly acrylonitrile fibers**  
Journal of Applied Polymer Science 133(2016), Nr.29, Art. 43698, 9 p.
- Köckritz, T.; Luther, R.; Paschew, G.; Jansen, I.; Richter, A.; Jost, O.; Schönecker, A.; Beyer, E.  
**Full polymer dielectric elastomeric actuators (DEA) functionalised with carbon nanotubes and high-K ceramics**  
Micromachines 7(2016), Nr.10, Art. 172, 15 p.
- Köhler, B.; Gaul, T.; Liesche, U.; Schubert, F.  
**Shear horizontal piezoelectric fiber patch transducers (SH-PFP) for guided elastic wave applications**  
NDT & E International 82(2016), p.1–12
- Köhler, B.  
**First special issue of case study in nondestructive testing and evaluation. Editorial.**  
Case Studies in Nondestructive Testing and Evaluation 6(2016), Pt.B, p.1
- Kopycinska-Müller, M.; Gluch, J.; Köhler, B.  
**Study of mechanical behavior of**
- AFM silicon tips under mechanical load**  
Nanotechnology 27(2016), Nr.45, Art. 454001, 16 p.
- Kopycinska-Müller, M.; Clausner, A.; Yeap, K.B.O.; Köhler, B.; Kuzeyeva, N.; Mahajan, S.; Savage, T.; Zschech, E.; Wolter, K.-J.  
**Mechanical characterization of porous nano-thin films by use of atomic force acoustic microscopy**  
Ultramicroscopy 162(2016), p.82–90
- Kraatz, M.; Gall, M.; Zschech, E.; Schmeißer, D.; Ho, P.S.  
**A model for statistical electromigration simulation with dependence on capping layer and Cu microstructure in two dimensions**  
Computational Materials Science 120(2016), p.29–35
- Kruse, N.; Schießer, Y.; Kämnitz, S.; Richter, H.R.; Voigt, I.; Braun, G.; Repke, J.U.  
**Carbon membrane gas separation of binary CO<sub>2</sub> mixtures at high pressure**  
Separation and Purification Technology 164(2016), p.132–137
- Kunze, S.  
**Entwicklung von SiSiC-Strukturkeramiken aus Reaktionsharzbeton**  
Stuttgart: Fraunhofer Verlag, 2016, 115 p., XVII  
(Zugl.: Dresden, TU, Diss., 2016)  
(Kompetenzen in Keramik. Schriftenreihe, 34)  
ISBN 978-3-8396-1029-9
- Kusnezoff, M.; Trofimenko, N.; Müller, M.; Michaelis, A.  
**Influence of electrode design and contacting layers on performance of electrolyte supported SOFC/SOEC single cells**  
Materials 9(2016), Nr.11, Art. 906, 13 p.
- Lenczner, M.; Yang, B.; Bontempi, A.; Teysieux, D.; Cogan, S.D.; Janus, P.; Köhler, B.; Ratier, N.  
**A STHM probe optimization and its time-space multi-scale modeling**  
Mechatronics 40(2016), p.251–263
- Li, Q.; Gluch, J.; Krüger, P.; Gall, M.; Neinhuis, C.; Zschech, E.  
**Pollen structure visualization using high-resolution laboratory-based hard X-ray tomography**  
Biochemical and Biophysical Research Communications 479(2016), Nr.2, p.272–276
- Liao, Z.; Gall, M.; Ye, K.B.; Sander, C.; Clausner, A.; Mühle, U.; Gluch, J.; Standke, Y.; Rosenkranz, R.; Aubel, O.; Hauschildt, M.; Zschech, E.  
**TEM investigation of time-dependent dielectric breakdown mechanisms in Cu/Low-k interconnects**  
IEEE Transactions on Device and Materials Reliability 16(2016), Nr.4, p.455–460
- Lin, H.-T.(Ed.); Hemrick, J.(Ed.); Singh, M.(Vol. Ed.); Ohji, T.(Vol. Ed.); Michaelis, A.(Vol. Ed.); American Ceramic Society -ACerS-, Westerville/Ohio:  
**Advanced and Refractory Ceramics for Energy Conservation and Efficiency**  
Hoboken, NJ: Wiley, 2016, IX, 202 p.  
(Ceramic Transactions, 256)  
ISBN 978-1-119-23458-6;  
ISBN 978-1-119-23459-3
- Lomtscher, A.; Jobst, K.; Fogel, S.; Rostalski, K.; Stempin, S.; Kraume, M.  
**Scale-up of mixing processes of highly concentrated suspensions using electrical resistance tomography**  
Flow Measurement and Instrumentation (2016), Online First, 18 p.
- Majumder, A.  
**Functionalization and large scale assembly of carbon nanotubes**  
Dresden, 2016, 113 p.  
(Dresden, TU, Diss., 2016)  
(URN: urn:nbn:de:bsz:14-qucosa-203279)
- Martin, H.-P.; Pönicke, A.; Kluge, M.; Sichert, I.; Rost, A.; Conze, S.; Wätzig, K.; Schilm, J.; Michaelis, A.  
**TiO<sub>x</sub>-based thermoelectric modules: Manufacturing, properties, and operational behavior**  
Journal of Electronic Materials 45(2016), Nr.3, p.1570–1575
- Matthews, S.; Berger, L.-M.  
**Long-term compositional/microstructural development of Cr<sub>3</sub>C<sub>2</sub>-NiCr coatings at 500 °C, 700 °C and 900 °C**  
International Journal of Refractory Metals and Hard Materials 59(2016), p.1–18
- Meinel, J.; Kirsten, M.; Cherif, C.; Michaelis, A.  
**Influence of PAN-fiber stretching during thermal treatment on the stabilization reactions**  
American Journal of Analytical Chemistry 7(2016), Nr.3, p.282–293
- Michaelis, A.(Hrsg.); Schneider, M.(Hrsg.):  
**Symposium Anodisieren – Oxid-schichten von hart bis smart 2016: 24.–25. November 2016, Dresden, Tagungsband.**  
Stuttgart: Fraunhofer Verlag, 2016, 80 p.  
(Schriftenreihe Angewandte Elektrochemie in der Werkstoffwissenschaft, V)  
ISBN 978-3-8396-1119-7
- Michaelis, A.; Stelter, M.; Klemm, H.; Voigt, I.; Kriegel, R.  
**Current Trends in Ceramic Technologies and Systems**  
Ohji, T.: Engineered Ceramics: Current Status and Future Prospects  
Hoboken, NJ: Wiley, 2016, p.381–414

- Mietschke, M.; Chekhonin, P.; Molin, C.; Gebhardt, S.; Fähler, S.; Nielsch, K.; Schultz, L.; Hühne, R. **Influence of the polarization anisotropy on the electrocaloric effect in epitaxial PMN-PT thin films** Journal of Applied Physics 120(2016), Nr.11, Art. 114102, 8 p.
- Molin, C.; Gebhardt, S. **PMN-8PT device structures for electrocaloric cooling applications** Ferroelectrics 498(2016), p.111-119
- Moritz, T.; Scheithauer, U.; Schwarzer, E.; Ahlhelm, M. **Medizinische Komponenten und Design-Artikel aus Keramik – hergestellt mit additiver Fertigungstechnik** wt Werkstattstechnik online 106(2016), Nr.7/8, p.1-2
- Nakahataa, K.; Sugahara, H.; Barth, M.; Köhler, B.; Schubert, F. **Three dimensional image-based simulation of ultrasonic wave propagation in polycrystalline metal using phase-field modeling** Ultrasonics 67(2016), p.18-29
- Opitz, J.; Wunderlich, C.; Bendjus, B.; Cikalova, U.; Wolf, C.; Naumann, S.; Lehmann, A.; Barth, M.; Duckhorn, F.; Köhler, B.; Tschöke, K.; Tschöpe, C.; Moritz, T.; Scheithauer, U.; Windisch, T. **Materialdiagnose und integrale Prüfverfahren für keramische Bauteile** Keramische Zeitschrift 68(2016), Nr.4/5, p.249-254
- Pfeifer, T.(Ed.); Matyás, J.(Ed.); Balaya, P.(Ed.); Singh, D.(Ed.); Wei, J.(Ed.); Singh, M.(Vol. Ed.); Ohji, T.(Vol. Ed.); Michaelis, A.(Vol. Ed.); American Ceramic Society -ACerS-, Westerville/Ohio: **Ceramics for Energy Conversion, Storage, and Distribution Systems** Hoboken, NJ: Wiley, 2016, 290 p. (Ceramic Transactions, 255) ISBN 978-1-119-23448-7; ISBN 978-1-119-23453-1
- Pingen, D.; Altintas, C.; Schaller, M.R.; Vogt, D. **A ruthenium racemisation catalyst for the synthesis of primary amines from secondary amines** Dalton Transactions 45(2016), Nr.29, p.11765-11771
- Pippardt, U.; Bernhardt, M.; Böer, J.; Kiesel, L.; Kircheisen, R.; Krieger, R.; Voigt, I.; Weyd, M. **Herstellung von dünnen mischleitenden  $Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-\delta}$  - Membranen mit hoher Sauerstoffpermeation auf porösen röhrenförmigen Trägern im Cofiring** Keramische Zeitschrift 68(2016), Nr.1, p.28-36
- Pötschke, J. **Gefügeausbildung und Eigenschaften von nanoskaligen bindefreien Hartmetallen** Stuttgart: Fraunhofer Verlag, 2016, VII, 190 S. (Zugl.: Dresden, TU, Diss., 2016) (Kompetenzen in Keramik. Schriftenreihe, 36) ISBN 978-3-8396-1104-3
- Pötschke, J.; Höhn, S.; Richter, V.; Mayer, M. **Microstructural evolution during sintering of cermets studied using interrupted sintering experiments and novel 2D and 3D FESEM based techniques** International Journal of Refractory Metals and Hard Materials 63(2017), p.47-54
- Prasad, R.M.; Jüttke, Y.; Richter, H.; Voigt, I.; Riedel, R.; Gurlo, A. **Mechanism of gas separation through amorphous silicon oxycarbide membranes** Advanced Engineering Materials 18(2016), Nr.5, p.721-727
- Reichel, U.; Notni, G.; Duparré, A.; Müller, F.A.; König, S.; Herold, V. **Hochtemperatur-Stabilität optikrelevanter Eigenschaften von transparenter  $MgAl_2O_4$ -Spinell-Keramik** Kriegesmann, J.; Deutsche Keramische Gesellschaft e.V. (DKG): Technische Keramische Werkstoffe. Loseblattausgabe. Aktualisierte Ausgabe Ellerau: HvB Verlag, 22 p. (150. Ergänzungslieferung, Kapitel 8.6.2.1)
- Reichert, E. **Theoretische und experimentelle Untersuchungen zu Stofftransport und Druckverlust in geschütteten und strukturierten Festbetten** Stuttgart: Fraunhofer Verlag, 2016, VII, 115 p. (Zugl.: Dresden, TU, Diss., 2016) (Schriftenreihe Kompetenzen in Keramik und Umweltverfahrenstechnik, 3) ISBN 978-3-8396-1037-4
- Reitzig, M.; Goodband, R.; Schuster, C.; Härtling, T. **Optical electron beam dosimetry with ceramic phosphors as passive sensor material for broad dose ranges** Technisches Messen:TM 83(2016), Nr.3, p.171-179
- Richter, H.-J.; Moritz, T.; Scheithauer, U.; Ahlhelm, M.; Schwarzer, E. **Additive manufacturing of ceramic components using powder bed and suspension methods** Ceramic Applications 4(2016), Nr.1, p.51-55
- Rodríguez-Arteche, I.; Martínez Aznar, M.M.; Garitagoitia, M.A. **La competencia sobre planificación de investigaciones en 4º de ESO: Un estudio de caso** Revista Complutense de Educación 27(2016), Nr.1, p.329-351
- Sanliyalp, M.; Molin, C.; Shvartsman, V.V.; Gebhardt, S.; Lupascu, D.C. **Modified differential scanning calorimeter for direct electrocaloric measurements** IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control 63(2016), Nr.10, p.1690-1696
- Schilm, J.; Goldberg, A.; Partsch, U.; Dürfeld, W.; Arndt, D.; Pönicke, A.; Michaelis, A. **Joining technologies for a temperature-stable integration of a LTCC-based pressure sensor** Journal of Sensors and Sensor Systems 5(2016), Nr.1, p.73-83
- Schneider, M.; Schubert, N.; Michaelis, A. **Anodic dissolution of solid-state sintered silicon carbide at high current densities** Materials and Corrosion (2016), Online First, 6 p.
- Schneider, M.; Kremmer, K.; Höhn, S. **Corrosion protection of thickness reduced plasma electrolytic layers on AZ31** Materials and Corrosion 67(2016), Nr.9, p.921-928
- Schneider, M.; Lämmel, C.; Hübner, R.; Gierth, U.; Michaelis, A. **TEM investigation of barrier-like anodic oxide films on aluminum** Surface and Interface Analysis 48(2016), Nr.8, p.906-912
- Sempff, K.; Boese, M.; Gnauck, P.; Höhn, S.; Herrmann, M. **Determination of local resistivity in ceramic composites by electron microscopy** Journal of the European Ceramic Society 36(2016), Nr.14, p.3531-3537
- Shimamura, K.(Ed.); Kirihara, S.(Ed.); Akedo, J.(Ed.); Ohji, T.(Ed.); Naito, M.(Ed.); Singh, M.(Vol. Ed.); Ohji, T.(Vol. Ed.); Michaelis, A.(Vol. Ed.); American Ceramic Society -ACerS-, Westerville/Ohio: **Additive Manufacturing and Strategic Technologies in Advanced Ceramics** Hoboken, NJ: Wiley, 2016, X, 230 p. (Ceramic Transactions, 258) ISBN 978-1-119-23600-9; ISBN 978-1-119-23601-6
- Slawik, T.; Günther, A.; Moritz, T.; Michaelis, A. **Co-sintering behaviour of zirconia-ferritic steel composites** AIMS Materials Science 3(2016), Nr.3, p.1160-1176
- Stark, S.; Neumeister, P.; Balke, H. **A hybrid phenomenological model for ferroelectroelastic ceramics. Part II: Morphotropic PZT ceramics** Journal of the Mechanics and Physics of Solids 95(2016), p.805-826
- Stark, S.; Neumeister, P.; Balke, H. **A hybrid phenomenological model for ferroelectroelastic ceramics. Part I: Single phased materials** Journal of the Mechanics and Physics of Solids 95(2016), p.774-804
- Stark, S.; Neumeister, P.; Balke, H. **Some aspects of macroscopic phenomenological material models for ferroelectroelastic ceramics** International Journal of Solids and Structures 80(2016), p.359-367
- Svoboda, H. **Untersuchungen zu mikroskopischen und makroskopischen Grünkörperfehlern bei der uniaxialen Pressverdichtung** Dresden, 2016, 130 p. (Dresden, TU, Diss., 2016)
- Thiele, M.; Herrmann, M.; Müller, C.; Michaelis, A. **Formation of secondary borides in liquid phase-sintered  $B_2O_3$  materials** Journal of the European Ceramic Society 36(2016), Nr.7, p.1549-1557
- Trunec, M.; Klimke, J.; Shen, Z.-J. **Transparent alumina ceramics densified by a combinational approach of spark plasma sintering and hot isostatic pressing** Journal of the European Ceramic Society 36(2016), Nr.16, p.4333-4337
- Vogt, H.; Altmann, F.; Braun, S.; Celik, Y.; Dietrich, L.; Dietz, D.; Dijk, Marius van; Dreiner, S.; Döring, R.; Gabler, F.; Goehlich, A.; Hutter, M.; Ihle, M.; Kappert, H.; Kordas, N.; Kokozinski, R.; Naumann, F.; Nowak, T.; Oppermann, H.; Partsch, U.; Petzold, M.; Roscher, F.; Rzepka, S.; Schubert, R.; Weber, C.; Wiemer, M.; Wittler, O.; Ziesche, S. **HOT-300 – a multidisciplinary technology approach targeting microelectronic systems at 300 °C operating temperature** IMAPS Additional Conferences (Device Packaging, HiTEC, HiTEN, & CICMT). Online journal (2016), Issue HiTEC, p.1-10
- Wang, L.(Ed.); Imanak, N.(Ed.); Kriven, W.M.(Ed.); Fukushima, M.(Ed.); Kale, G.(Ed.); Singh, M.(Vol. Ed.); Ohji, T.(Vol. Ed.); Michaelis, A.(Vol. Ed.); American Ceramic Society -ACerS-, Westerville/Ohio: **Ceramics for Environmental Systems** Hoboken, NJ: Wiley, 2016, VII, 160 p. (Ceramic Transactions, 257) ISBN 978-1-119-23444-9; ISBN 978-1-119-23446-3
- Wätzig, K.; Krell, A. **The effect of composition on the optical properties and hardness of transparent Al-rich  $MgO-nAl_2O_3$  spinel ceramics** Journal of the American Ceramic Society 99(2016), Nr.3, p.946-953

## NAMES, DATES, EVENTS

- Wätzig, K.; Rost, A.; Langklotz, U.; Matthey, B.; Schilm, J.  
**An explanation of the microcrack formation in  $\text{Li}_{1.3}\text{Al}_{0.3}\text{Ti}_{1.7}(\text{PO}_4)_3$  ceramics**  
Journal of the European Ceramic Society 36(2016), Nr.8, p.1995–2001
- Weil, M.; Meißner, T.; Springer, A.; Bundschuh, M.; Hübler, L.; Schulz, R.; Duis, K.  
**Oxidized carbo-iron causes reduced reproduction and lower tolerance of juveniles in the amphipod *Hyalella azteca***  
Aquatic Toxicology 181(2016), p.94–103
- Weiser, M.; Schulze, C.; Schneider, M.; Michaelis, A.  
**Platinum electrodeposition from a dinitrosulfatoplatinate(II) electrolyte**  
Applied Surface Science 390(2016), p.333–338
- Winkin, N.; Gierth, U.; Mokwa, W.; Schneider, M.  
**Nanomaterial-modified flexible micro-electrode array by electrophoretic deposition of carbon nanotubes**  
Journal of Biochips & Tissue Chips 6(2016), Nr.1, Art. 1000115, 6 p.
- Wolf, A.; Härtling, T.; Hinrichs, D.; Dorfs, D.  
**Synthesis of plasmonic  $\text{Cu}_2\text{Se}$ @ $\text{ZnS}$  Core@Shell nanoparticles**  
ChemPhysChem 17(2016), Nr.5, p.717–723
- Wollbrink, A.; Volgmann, K.; Koch, J.A.; Kanthasamy, K.; Tegekamp, C.; Li, Y.; Richter, H.R.; Kämnitz, S.; Steinbach, F.; Feldhoff, A.; Caro, J.  
**Amorphous, turbostratic and crystalline carbon membranes with hydrogen selectivity**  
Carbon 106(2016), p.93–105
- Wuchrer, R.; Amrehn, S.; Liu, L.; Wagner, T.; Härtling, T.  
**A compact readout platform for spectral-optical sensors**  
Journal of Sensors and Sensor Systems 5(2016), Nr.1, p.157–163
- Yoo, Y.-M.; Han, T.-Y.; Kim, H.S.  
**Melatonin suppresses autophagy induced by clinostat in preosteoblast MC3T3-E1 cells**  
International Journal of Molecular Sciences 17(2016), Nr.4, Art. 526, 13 p.
- **Presentations and poster**  
-----
- Workshop Additive Manufacturing**, Singapore, 14.–16.1.2016
- Opitz, J.  
Fraunhofer Institute for Ceramic Technologies and Systems IKTS: Branch materials diagnostics  
Presentation (author)
- 40th International Conference and Exhibition on Advanced Ceramics and Composites – ICACC 2016**, Daytona Beach, 24.–29.1.2016
- Adler, J. et al.  
**Effect of membranes in exhaust particulate filtration**  
Presentation (author)
- Bienert, C. et al.  
**CFY-Stack Technology for SOEC applications**  
Presentation (author)
- Gaczynski, P.; Harpf, A. et al.  
**High-temperature 57Fe Mössbauer study of mixed ionic-electronic conducting  $(\text{Ba}_{0.5}\text{Sr}_{0.5})(\text{Co}_{0.8}\text{Fe}_{0.2})\text{O}_{3-\delta}$**   
Presentation (co-author)
- Hennicke, J. et al.  
**Combining flash sintering/sinter-forging with hybrid FAST/SPS technology for oxide and non-oxide materials**  
Presentation (author)
- Hennicke, J. et al.  
**Enhancements on FAST sintering systems promote transfer from the lab to industrial applications**  
Presentation (author)
- Klemm, H. et al.  
**Ceramic turbo charger of silicon nitride – Material development and fabrication**  
Presentation (author)
- Klimke, J.  
**Gelcasting of transparent ceramics**  
Invited presentation (author)
- Kusnezoff, M. et al.  
**MEA performance evaluation using different methods for area specific resistance estimation**  
Presentation (author)
- Michaelis, A.  
**Smart advanced ceramic materials for energy and environmental technology**  
Invited presentation (author)
- Moritz, T. et al.  
**Additive manufacturing of advanced ceramic components: What is possible today and what are the trends?**  
Invited presentation (author)
- Schwarzer, E. et al.  
**Suspension-based additive manufacturing of ceramic, metal and metal-ceramic components**  
Presentation (author)
- Wätzig, K. et al.  
**Lithium loss indicated formation of microcracks in LATP ceramics**  
Presentation (author)
- Wolf, C. et al.  
**In-situ optical coherence tomography inspection of laser-structured polycrystalline ceramics**  
Presentation (author)
- 4th Germany-Japan Joint Workshop “Organic Electronics and Nano Materials for Energy”**, Tokyo, 25.1.2016
- Eberstein, M. et al.  
**Ceramic functional inks for high definition 3D printed electronics**  
Presentation (author)
- 15th International Nanotechnology Exhibition & Conference – nano tech 2016**, Tokyo, 27.–29.1.2016
- Eberstein, M.  
**High performance thick film pastes for  $\text{AlN}$ ,  $\text{Si}_3\text{N}_4$ , and warp-age free LTCC**  
Presentation (author)
- 23. Seminar des Arbeitskreises “Elektrochemie in Sachsen”**, Dresden, 5.2.2016
- Liebmann, T. et al.  
**Mikroelektrochemische Untersuchungen an AA2024**  
Presentation (author)
- Schrötte, E. et al.  
**Verhalten von EKasic D bei hohen anodischen Stromdichten**  
Presentation (author)
- Scientific discussion meeting of the Royal Society: Taking the temperature of phase transitions in cool materials**, London, 8.–9.2.2016
- Molin, C. et al.  
**PMN-PT multilayer ceramic devices for electrocaloric cooling applications**  
Poster (author)
- 145th TMS Annual Meeting & Exhibition – TMS 2016**, Nashville, 14.–18.2.2016
- Gluch, J. et al.  
**Novel in-situ mechanical tests within an X-ray microscope**  
Presentation (author)
- 8. DVS/GMM-Tagung: Elektronische Baugruppen und Leiterplatten**, Fellbach near Stuttgart, 16.–17.2.2016
- Dudek, R.; Hildebrandt, M.; Rzepka, S.; Röllig, M. et al.  
**Sprödbuchrisiko an keramischen Bauelementen in Abhängigkeit vom Hochtemperatur-Lotwerkstoff und der Beanspruchungsgeschwindigkeit**  
Presentation (co-author)
- Meier, K. et al.  
**Zuverlässigkeitsuntersuchungen an organischen Leiterplatten mit dickem Kupferkern für leistungselektronische Anwendungen**  
Presentation (author)
- Metais, B.; Kabakchiev, A.; Guyenot, M.; Metasch, R. et al.  
**Entwicklung einer Pro-aktiven**
- Lötstellengeometrie-unabhängigen Lebensdauersimulation für bleifreie Lote  
Presentation (co-author)
- Metasch, R. et al.  
**Messverfahren zur thermo-mechanischen Charakterisierung von Werkstoffen der Hochtemperatur-AVT**  
Presentation (author)
- Röllig, M. et al.  
**Schnelle Beanspruchungsanalyse von elektronischen Motorsteuerungen unter Vibrationslast als Unterstützung im Designprozess**  
Presentation (author)
- Schwerz, R. et al.  
**Langzeitstabile und robuste Kapselung von Elektronikbaugruppen für Unterwasseranwendungen**  
Presentation (author)
- Fraunhofer-Forschungsmanager-Prädikatsprogramm**, Dresden, 17.02.2016
- Michaelis, A.  
**Innovationsmanagement bei Fraunhofer mit Beispielen aus der Praxis**  
Presentation (author)
- 5th International Nanotechnology Conference & Exhibition – Nanolsrael**, Tel Aviv, 22.–23.2.2016
- Michaelis, A.  
**Smart ceramic materials for energy and environmental technology**  
Presentation (author)
- Innovationsforum FerroKat**, Leipzig, 23.–24.2.2016
- Gaitzsch, U.; Walther, G.; Lincke, M. et al.  
**Entwicklung eines neuartigen energie- und rohstoffeffizienten Entschwefelungssystems für die Erzeugung von Bio-Erdgas**  
Presentation (author)
- Reichelt, E.  
**Synthese höherer Alkohole an Eisenkatalysatoren**  
Presentation (author)
- ATC Tagung**, Frankfurt on the Main, 25.–26.2.2016
- Reger-Wagner, N. et al.  
**Adsorptionsselektive Kohlenstoffmembranen auf keramischen Trägern**  
Poster (author)
- 14. Treffen des DGG-DKG Arbeitskreises “Glasig-kristalline Multifunktionswerkstoffe”**, Berlin, 25.–26.2.2016
- Rost, A. et al.  
**Glaskeramiken als Werkstoffe für Festkörperbatterien**  
Invited presentation (author)

- Fortbildungsseminar Hochtemperatur-Sensorik**, Goslar, 25.–26.2.2016
- Rebenklau, L. et al.  
Aufbau- und Verbindungstechnik  
Presentation (author)
- Jahrestreffen der ProcessNet-Fachgruppen "Mechanische Flüssigkeitsabtrennung und Membrantechnik"**, Kassel, 2.–3.3.2016
- Voigt, I.  
Keramische Membranen: Anwendungsbeispiele und Zukunftspotentiale  
Vortrag (Autor)
- 49. Essener Tagung für Wasser- und Abfallwirtschaft "Wasserwirtschaft 4.0"**, Essen, 2.–4.3.2016
- Schulze, E.  
autartec® – Technologien zur autarken Wasserver- und -entsorgung  
Presentation (author)
- 27. Konferenz Elektronische Sprachsignalverarbeitung – ESSV 2016**, Leipzig, 2.–4.3.2016
- Tschöpe, C. et al.  
Universal Cognitive User Interface – UCUI  
Poster (author)
- 28. Deutsche Zeolith-Tagung**, Giessen, 2.–4.3.2016
- Gleichmann, K.; Fischer, G. et al.  
Compact zeolite form body free of binding agent type LTA and FAU  
Poster (co-author)
- Gleichmann, K.; Brandt, A.; Zimmermann, J.; Unger, B.; Richter, H.  
Pades – Development of new technologies for zeolite manufacturing  
Poster (co-author)
- Jüttke, Y. et al.  
Carbon infiltration in NF membranes as model for pore blocking  
Poster (author)
- Lüdke, D.; Schüle, M.; Jüttke, Y. et al.  
Closing of defects via infiltration and carbonization of furfuryl alcohol of supported zeolite BEA membranes  
Poster (co-author)
- Schüle, M.; Lüdke, D.; Richter, H. et al.  
Carbon integrated zeolite membranes – A defect closing method  
Poster (co-author)
- Simon, A. et al.  
Improvement of zeolite membranes by CVD-carbon deposition  
Poster (author)
- International Symposium of Innovative Ceramic Manufacturing Process Technology**, Tokyo, 4.3.2016
- Pfeifer, T. et al.  
Portable fuel cell systems based on multilayer ceramics technology and derived design concepts  
Invited presentation (author)
- Conference on Electric Field Assisted Sintering and Related Phenomena Far From Equilibrium – ECI**, Tomar, 6.–11.3.2016
- Räthel, J. et al.  
Flash sintering by the use of hybrid-heated FAST/SPS technique  
Presentation (author)
- 80. Jahrestagung der DPG und DPG-Frühjahrstagung**, Regensburg, 6.–11.3.2016
- Zschech, E. et al.  
Laboratory-based X-ray microscopy – Technique and applications  
Presentation (author)
- Phosphor Global Summit**, Newport Beach, 7.–9.3.2016
- Kinski, I. et al.  
Development and characterization of transparent and other optically active ceramics  
Presentation (author)
- 91. DKG Jahrestagung & Symposium Hochleistungskeramik 2016**, Freiberg, 7.–9.3.2016
- Abel, J.  
Joining of  $Al_2O_3/Al_2O_3$  and  $Si_3N_4/Si_3N_4$  ceramics without using additives  
Presentation (author)
- Abel, J.  
Micro gas turbine rotor made of silicon nitride: Approach, development and operation  
Presentation (author)
- Baumgärtner, C.  
Phase transformation in nanoporous  $LiAlO_2$   
Presentation (author)
- Eckhard, S.  
Modification of internal granule structures via suspension formulation and process parameters  
Presentation (author)
- Gestrich, T. et al.  
Erhitzungsmikroskopie in hochreinen Atmosphären und komplexe thermische Analyse für das Löten von Keramik und die Herstellung von Hochleistungskeramik  
Presentation (author)
- Gradmann, R. et al.  
Adaption of ceramic thick-film materials for laser sintering in integrated sensor applications  
Poster (author)
- Günther, A.  
Textiles in ceramic – Manufacturing and applications for structural and functional materials  
Presentation (author)
- Herrmann, M. et al.  
Corrosion of silicon carbide bonded diamond ceramics and SiSiC-materials in aqueous solutions  
Presentation (author)
- Kircheisen, R. et al.  
Keramische Membrankomponenten für die  $O_2$ -Erzeugung in Rauchgasen  
Poster (author)
- Kunz, W.  
Self-healing materials as environmental barrier coatings for gas turbines  
Presentation (author)
- Martin, H.-P.  
Herstellung von Keramikverbunden mit hochtemperaturstabilen Titanaluminiden  
Presentation (author)
- Müller-Köhn, A. et al.  
Powder Injection Moulding (PIM) of glass composites for electrical conductive and decorative components  
Presentation (author)
- Opitz, J. et al.  
Development of nanodiamond-based coatings for titanium alloy oxide layers  
Presentation (author)
- Opitz, J. et al.  
Novel characterization technologies for structural ceramics  
Presentation (author)
- Potthoff, A.  
 $Cr_2O_3/TiO_2$ -Hochleistungsschichten durch thermisches Spritzen von wässrigen Suspensionen  
Presentation (author)
- Reinhardt, K.  
Rheological properties of thick film pastes and their effects on printing performance  
Presentation (author)
- Richter, H.-J.  
Plastic forming of flat ceramic substrates using an extrusion and rolling process  
Poster (author)
- Richter, J. et al.  
Ceramic membrane reactors for improvement in efficiency  
Poster (author)
- Scheithauer, U. et al.  
New lightweight kiln furniture produced by combining tape casting and extrusion  
Presentation (author)
- Scheithauer, U. et al.  
Suspension based additive manufacturing of ceramic and metal-ceramic components  
Presentation (author)
- Schmidt, R. et al.  
Shrinkage controlled pastes for bulky silver and copper thick films in power electronics  
Presentation (author)
- Schönfeld, K. et al.  
ZrC – A potential material for ultrahigh temperature heaters  
Presentation (author)
- Seidel, M. et al.  
Characterization of the lithium ion battery high voltage cathode material  $LiNi_{0.5}Mn_{1.5}O_4$  synthesized from different precursor chemistries and calcination parameters  
Presentation (author)
- Seuthe, T. et al.  
Ceramic decals – Pre-adjusted thick film circuits and sensors for variable surfaces  
Presentation (author)
- Seuthe, T. et al.  
Thick film measuring resistors with minimized temperature coefficients  
Presentation (author)
- Voigt, I. et al.  
Design of micropores in inorganic membranes for efficient separation of liquids and gases  
Presentation (author)
- Wätzig, K. et al.  
Preparation and characterization of LATP ceramics for solid electrolytes  
Presentation (author)
- Ziesche, S.  
Mehrlagenkeramik und Keramikspritzguss – Eine technologische Kombination zur Herstellung dreidimensionaler funktioneller LTCC-Komponenten  
Presentation (author)
- 6th International Conference on Silicon Photovoltaics – SiliconPV 2016**, Chambéry, 7.–10.3.2016
- Körner, S. et al.  
Low temperature paste for preparation of high efficiency HJT solar cells  
Presentation (author)
- 18. Werkstofftechnisches Kolloquium – WTK 2016**, Chemnitz, 10.–11.3.2016
- Berger, L.-M.  
Binary WC- and  $Cr_3C_2$ -containing hardmetal compositions for thermally sprayed coatings  
Presentation (author)
- China Semiconductor Technology International Conference 2016 – CSTIC**, Shanghai, 13.–14.3.2016

## NAMES, DATES, EVENTS

- Gabler, F.; Roscher, F.; Döring, R.; Otto, A.; Ziesche, S. et al.  
**Materials and technologies to enable high temperature stable MEMS and electronics for smart systems used in harsh environments**  
Presentation (co-author)
- Workshop 2 des Innovationsforums SpreuStroh: "Energetische Nutzung der Biomasse SpreuStroh"**, Leipzig, 14.3.2016
- Schwarz, B.  
Stroh – Strohpellets – Biogaspellets: Alternative Möglichkeiten zur verbesserten Biomethanproduktion  
Presentation (author)
- 49. Jahrestreffen Deutscher Katalytiker**, Weimar, 16.3.2016
- Jäger, B. et al.  
Wirkungsgrad-Steigerung in der alkalischen Wasser-Elektrolyse  
Poster (author)
- Schaller, M. et al.  
Production of long-chained alcohols from syngas on iron catalysts  
Poster (author)
- 3rd Fraunhofer Direct Digital Manufacturing Conference – DDMC 2016**, Berlin, 16.–17.3.2016
- Lausch, H. et al.  
Multi-material approach to integrate ceramic boxed temperature-sensitive components in laser beam melted structures for bio and other applications  
Presentation (author)
- Schwarzer, E. et al.  
Development of photo-curable ceramic suspensions usable for additive manufacturing combined with freeze foaming  
Presentation (author)
- Springer, P.; Schwarzer, E. et al.  
Equipment, material and processes for UV-DLP-based additive manufacturing of two-component ceramic green bodies and dense structures  
Presentation (co-author)
- Conference on Optical Chemical Sensors and Biosensors – EUROPT(R)ODE XIII**, Graz, 20.–23.3.2016
- Wuchrer, R. et al.  
A holistic plasmonic sensor system  
Poster (author)
- Smart Materials and Nondestructive Evaluation for Energy Systems – 2016**, Las Vegas, 20.–24.3.2016
- Hakim, I.; May, D.; Ras, M.; Meyendorf, N. et al.  
Quantifying voids effecting delamination in carbon/epoxy  
**composites: Static and fatigue fracture behavior**  
Presentation (co-author)
- Meyendorf, N. et al.  
NDE applications in microelectronic industries  
Presentation (author)
- Wunderlich, C.  
Nondestructive cell evaluation techniques in SOFC stack manufacturing  
Presentation (author)
- 13th Symposium for Fuel Cell and Battery Modeling and Experimental Validation – ModVal13**, Lausanne, 22.–23.3.2016
- Ganzer, G. et al.  
New method for determining area-specific resistance of a MCFC stack  
Presentation (author)
- 2016 MRS Spring Meeting & Exhibit**, Phoenix, 28.3.–1.4.2016
- Zschech, E. et al.  
Micro and nano X-ray tomography of 3D IC stacks  
Presentation (author)
- International Exhibition and Conference for the Printed Electronics Industry – LOPEC 2016**, Munich, 5.–7.4.2016
- Körner, S. et al.  
Printable transparent organic resistors for sensor applications  
Poster (author)
- Thüringer Werkstofftag 2016**, Ilmenau, 6.4.2016
- Jäger, B. et al.  
Oberflächenaktive katalytische Mischmetalloxide zur Erhöhung des Wirkungsgrades bei der Wasserelektrolyse  
Presentation (author)
- Jüttke, Y. et al.  
Minimization of NF-membrane pores as model for blocking  
Poster (author)
- Kircheisen, R. et al.  
Schutzrohrkonzept zur Abwärmenutzung von Rauchgasen für Sauerstofftransportmembranen  
Poster (author)
- Reger-Wagner, N. et al.  
Keramische Membranreaktoren zur Effizienzsteigerung in der chemischen Verfahrenstechnik  
Poster (author)
- Simon, A. et al.  
Defect blocking of zeolite membranes by CVD-carbon deposition  
Presentation (author)
- Villwock, M. et al.  
Studies on manufacturing SAPO-**34 mixed-matrix membranes**  
Poster (Autor)
- 1. Thüringer Trinkwassertagung**, Jena, 6.–7.4.2016
- Voigt, I. et al.  
Wasseraufbereitung mit keramischen Membranen  
Presentation (author)
- Weyd, M. et al.  
Wasseraufbereitung durch Membranverfahren  
Poster (author)
- 4SMARTS Symposium für Smarte Strukturen und Systeme**, Darmstadt, 6.–7.4.2016
- Schubert, L. et al.  
Systementwicklung zur Strukturüberwachung mit geführten Wellen  
Presentation (author)
- 6th KMM-VIN Industrial Workshop "Innovative Material Solutions for Transport Applications"**, Hatfield, 7.–8.4.2016
- Kunz, W. et al.  
Development of a silicon nitride material for a micro gas turbine impeller  
Presentation (author)
- DLR Bauteilekonferenz 2016 – Qualitäts- und Produktsicherung**, Bonn, 12.–13.4.2016
- Scheithauer, U. et al.  
Additive Herstellung keramischer und metall-keramischer Bauteile  
Poster (author)
- Vakuumtag**, Dresden, 13.4.2016
- Nikolowski, K.  
Untersuchungen zum Befüllprozess von Lithium-Ionen-Batterien  
Presentation (author)
- 17th International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems – EuroSimE 2016**, Montpellier, 17.–20.4.2016
- Lenczner, M.; Yang, B.; Cogan, S.D.; Domas, S.; Ke, D.; Couturier, R.I.; Renault, D.; Köhler, B. et al.  
Temperature control of an SThM micro-probe with an heat source estimator and a lock-in measurement  
Presentation (co-author)
- Schwerz, R. et al.  
Robust and reliable encapsulation of electronics for underwater applications  
Presentation (author)
- Internationale Deponie- und Biogas-Fachtagung**, Lübeck, 18.–19.4.2016
- Kriegel, R.  
Sauerstoff für die motorische Nutzung von Schwachgasen  
Presentation (author)
- E4Water Final Conference: Integrated Industrial Water Management: Solutions For Practice**, Brussels, 19.–20.4.2016
- Weyd, M. et al.  
Ceramic membranes for water treatment  
Poster (author)
- 12th International Conference and Exhibition on Ceramic Interconnect and Ceramic Microsystems Technologies – CICMT 2016**, Denver, 19.–21.4.2016
- Eberstein, M. et al.  
Silver pastes with adjusted glass composition for warpage-free LTCC  
Presentation (author)
- Gradmann, R. et al.  
Adaption of functional ceramic materials for the laser sintering process in integrated sensor applications  
Presentation (author)
- Partsch, U. et al.  
LTCC-based pressure sensors for elevated operation temperatures up to 300 °C  
Presentation (author)
- DKG working group Keramische Membranen**, Frankfurt on the Main, 20.4.2016
- Richter, H. et al.  
Kohlenstoff als Membranmaterial für die Gastrennung  
Presentation (author)
- Virtuelle Besichtigung "autartec® – vom Entwurf zur Realisierung"**, Geierswalde, 21.4.2016
- Lincke, M. et al.  
Vom Grau- und Regenwasser zum Trinkwasser  
Presentation (author)
- Hannover Messe 2016: Werkstoff- & Leichtbau-Forum**, Hanover, 24.–29.4.2016
- Berger, L.-M.  
Verschleißfeste Hartmetallschichten für den Leichtbau  
Presentation (author)
- 7. Anwenderseminar 2D/3D-Rheologie und Stabilität von dispersen Systemen**, Potsdam, 25.–27.4.2016
- Meyer, A. et al.  
Untersuchungen der Stabilität von metallischen Nanopartikel-Tinten mittels Zentrifugalseparationsanalyse  
Invited presentation (author)



- GRL-FYK Opening Ceremony & Workshop**, Songdo, 25.–27.4.2016
- Opitz, J.  
Division bio- and medical technology at Fraunhofer IKTS  
Presentation (author)
- 26. Workshop des Forums Inn-O-Kultur**, Leipzig, 26.4.2016
- Hoyer, Thomas  
Anorganisch-organische Nanokompositbeschichtungen für Steine, Metalle, Kunststoffe  
Presentation (author)
- Kraftwerk Batterie 2016**, Münster, 26.–27.4.2016
- Reinke, C. et al.  
Analysis of the electrolyte penetration behavior in lithium-ion battery cells by electrical measurements  
Poster (author)
- Wolter, M. et al.  
EMBATT bipolar lithium battery concept – Approach to increase energy density for automotive application  
Poster (author)
- Deutsche Biotechnologietage**, Leipzig, 26.–27.4.2016
- Lehmann, A. et al.  
Spin-Off-Vorhaben des Fraunhofer IKTS: Optische Prostatakrebsdiagnose  
Presentation (author)
- 9. Biogas-Innovationskongress – BIOGAS 2016**, Osnabrück, 26.–27.4.2016
- Schwarz, B. et al.  
Stroh-basierte Biogaspellets als alternatives Inputsubstrat in Biogasanlagen  
Presentation (author)
- COST MP1105 Final Conference “Innovations in Flame Retardancy of Textiles and Related Materials”**, Poznan, 27.–28.4.2016
- Martins, M.; Slawik, T.; Moritz, T. et al.  
Ceramic tapes as fire protective coatings for CFRP composites  
Presentation (co-author)
- Printed Electronics Europe 2016**, Berlin, 27.–28.4.2016
- Fritsch, M. et al.  
Synthesis and formulation of particle inks for inkjet and aerosol-jet printing methods  
Presentation (author)
- Fritsch, M.  
Synthesis and properties of nanoinks for inkjet and aerosol-jet printing applications  
Presentation (author)
- Turbine Forum 2016: “Advanced Coatings for High Temperatures”**, Nice, 27.–29.4.2016
- Schönfeld, K. et al.  
Potential of ceramic matrix composites for gas turbine applications  
Presentation (author)
- Frühjahrestagung der Landesfachgruppe der neuen Bundesländer**, Hartha, 29.4.2016
- Hoyer, T.  
Einkomponentige werkseitige Nanokristallithbehandlung  
Presentation (author)
- 6th Workshop on Metallization & Interconnection for Crystalline Silicon Solar Cells**, Constance, 2.–3.5.2016
- Eberstein, M. et al.  
High performance silver polymer pastes for SHJ cells  
Presentation (author)
- Körner, S. et al.  
Transparent front side contact pastes for high efficiency SHJ-solar cells  
Presentation (author)
- Jahrestreffen Reaktionstechnik 2016 – ProcessNet**, Würzburg, 2.–4.5.2016
- Lomtscher, A.  
Einfluss der Anwesenheit von faserigen Partikeln auf das Fließverhalten und die Strömungsgeschwindigkeiten in gerührten Systemen  
Presentation (author)
- Pohl, M. et al.  
Konform temperierter Fluidmischer  
Poster (author)
- Reichelt, E. et al.  
Stofftransport und Druckverlust in geschütteten und strukturierten Festbetten  
Presentation (author)
- Schaller, M. et al.  
Synthese langkettiger Alkohole an Eisenkatalysatoren  
Poster (author)
- CNS Symposium 2016**, Caputh, 4.5.2016
- Hillmann, S. et al.  
Methoden zur Messung der mechanischen Spannung und des Ermüdungszustandes an Stählen mit magnetischem Barkhausenrauschen  
Invited presentation (author)
- 2016 Critical Materials Council Seminar – CMC**, Hillsboro, 5.–6.5.2016
- Sundqvist, J.  
ALD/CVD material & equipment
- market trends  
Presentation (author)
- 21st International Conference on Microwave, Radar and Wireless Communications – MIKON**, Krakow, 9.–11.5.2016
- Heuer, H. et al.  
High resolution radio frequency inspection of carbon fiber composites  
Presentation (author)
- AchemAsia**, Beijing, 9.–12.5.2016
- Richter, H. et al.  
Dewatering of glycol with zeolite NaA membranes for enhancement of natural gas drying  
Presentation (author)
- Richter, H. et al.  
Enhancement of natural gas drying by dewatering of glycol with zeolite NaA membranes  
Presentation (author)
- Richter, H. et al.  
Large scale ceramic nanofiltration membranes for water and waste water treatment  
Presentation (author)
- First Iranian Conference of FAST/SPS**, Teheran, 10.5.2016
- Räthel, J. et al.  
FAST/SPS Technology – Principles and applications for ceramic materials  
Presentation (co-author)
- International Conference on High Temperature Electronics – HiTEC / IMAPS 2016**, Albuquerque, 10.–12.5.2016
- Vogt, H.; Altmann, F.; Braun, S.; Celik, Y.; Dietrich, L.; Dietz, D.; van Dijk, M.; Dreiner, S.; Döring, R.; Gabler, F.; Goehlich, A.; Hutter, M.; Ihle, M. et al.  
HOT-300 – A multidisciplinary technology approach targeting microelectronic systems at 300 °C operating temperature  
Presentation (co-author)
- 39th International Spring Seminar on Electronics Technology – ISSE 2016**, Pilsen, 18.–22.5.2016
- Lenz, C. et al.  
Consideration of inhomogeneous shrinkages for LTCC-applications in panel-level processes  
Presentation (author)
- Ziesche, S. et al.  
Ceramic substrate technology for wafer level packaging of MEMS  
Presentation (author)
- 20. Leibniz-Konferenz – Recycling 2016**, Lichtenwalde, 19.–20.5.2016
- Voigt, I. et al.  
Recycling von seltenen Metallen
- aus Prozesswässern der Metall-Bergbauindustrie  
Presentation (author)
- Abschlussveranstaltung des Innovationsforums SpreuStroh**, Chemnitz, 19.–20.5.2016
- Schwarz, B.  
Das Biogaspellet – Energie und Dünger aus SpreuStroh  
Presentation (author)
- Glass & Optical Materials Division – GOMD 2016**, Madison, 22.–26.5.2016
- Möncke, D.; Wondraczek, L.; Brauer, D.; Brandt, J.; Ehrt, R.; Johannes, M. et al.  
Structural analysis by vibrational spectroscopy (IR and Raman) in the study of bio-glasses and glass ceramics  
Presentation (author)
- 4th Annual Seminar of ALD CoE “ALD precursors and processes”**, Helsinki, 23.–24.5.2016
- Puurunen, R. L.; Koshtyal, Y.; Pedersen, H.; van Ommen, J. R.; Yurkevich, O.; Sundqvist, J.  
Virtual project on the history of ALD: Overview and current status  
Poster (co-author)
- IEEE International Interconnect Technology Conference / Advanced Metallization Conference – IITC/AMC**, San José, 23.–26.5.2016
- Zschech, E. et al.  
Novel approaches to determine thermomechanical materials data in advanced interconnect stacks  
Presentation (author)
- 14th International Conference Reliability and Stress-Related Phenomena in Nanoelectronics – IRSP 2016**, Bad Schandau, 30.5.–1.6.2016
- Kteyan, A.; Mühle, U. et al.  
Analysis on effect of TSV-induced stress: Measurements and simulations  
Presentation (co-author)
- Niese, S. et al.  
Full-fiel hard X-ray microscopy and tomography for in-situ mechanical testing of BEOL structures  
Presentation (author)
- Zschech, E. et al.  
X-ray techniques for 3D metrology and diagnostics – Status and outlook  
Presentation (author)
- Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS – DTIP 2016**, Budapest, 30.5.–2.6.2016

## NAMES, DATES, EVENTS

- Ihle, M. et al.  
LTCC-Packaging of a laser optical system for harsh environments  
Presentation (author)
- 7th CIRP Conference on High Performance Cutting – HPC 2016**, Chemnitz, 31.5.–2.6.2016
- Bergs, T.; Richter, V.; Ottersbach, M.; Pötschke, J. et al.  
Tool technologies for milling of hardmetals and ceramics  
Presentation (co-author)
- Biomass to Power and Heat 2016**, Zittau, 1.–2.6.2016
- Scheithauer, O. et al.  
CLEANPELLET – Entwicklung eines Verfahrens für die Erzeugung emissionsarm verbrennbarer Gärrestpellets zu Nutzung als Brennstoff für Haus- und Kleinfeueranlagen  
Presentation (author)
- 23. Innovationstag Mittelstand des BMWi / Partnering Event – Innovation Day**, Berlin, 2.6.2016
- Reichel, U.  
New ceramic materials for innovative applications  
Presentation (author)
- DGMT Workshop IFAT 2016: Membrane Technologies for Environmental Protection**, Munich, 2.6.2016
- Pflieger, C. et al.  
Ceramic nanofiltration membranes for organic solvent filtration of oily water and organic solvents  
Presentation (author)
- Cross-border Expert Talks: “Carbide-, Cermet- and Ceramic Coatings”**, Prague, 2.–3.6.2016
- Berger, L.-M.  
Hardmetal coatings – Developments and trends  
Invited presentation (author)
- International Conference on Powder Metallurgy & Particulate Materials – POWDERMET 2016**, Boston, 5.–8.6.2016
- Pötschke, J. et al.  
Novel polycrystalline WC-Co based cemented carbides and their properties  
Presentation (author)
- XXI Physical Metallurgy and Materials Science Conference “Advanced Materials and Technologies” – AMT 2016**, Rawa Mazowiecka, 5.–8.6.2016
- Zscheck, E.  
Nano X-ray tomography – A novel technique for materials development  
Presentation (author)
- 11th Natural Gas Conversion Symposium – NGCS 11**, Tromsø, 5.–9.6.2016
- Schaller, M. et al.  
Production of long-chained alcohols from synthesis gas using iron catalysts  
Poster (author)
- 90. Glastechnische Tagung der DGG**, Goslar, 6.–8.6.2016
- Eberstein, M. et al.  
Einfluss von Glasadditiven auf das Sinterverhalten von Silberpulvern für die Metallisierung von LTCC-Substraten  
Presentation (author)
- Gradmann, R. et al.  
Entwicklung funktioneller Glaswerkstoffe für den laserbasierten Sinterungsprozess in integrierten Sensorsystemen  
Presentation (author)
- 11th International Conference on Brazing, High Temperature Brazing and Diffusion Bonding – LÖT 2016**, Aachen, 7.–9.6.2016
- Martin, H.-P. et al.  
Experimental investigations of TiAl-brazes for ceramic joining  
Presentation (author)
- Schilm, J. et al.  
Brazing of kovar to alumina and LTCC for integration of ceramic pressure sensors  
Presentation (author)
- 16th AUTEX World Textile Conference**, Ljubljana, 8.–10.6.2016
- Mühle, U. et al.  
Structural characterisation of carbon fibres along the fabrication process using SEM/FIB and TEM  
Presentation (author)
- 15th International Conference on New Actuators & 9th Exhibition on Smart Actuators and Drive Systems – ACTUATOR 16**, Bremen, 13.–15.6.2016
- Ehle, F. et al.  
An effective method for designing magnetic shape memory actuator systems  
Presentation (author)
- Hohlfeld, K. et al.  
Tailored composite transducers based on piezoceramic fibres and pearls  
Presentation (author)
- Cancer Diagnostics Conference & Expo**, Rome, 13.–15.6.2016
- Lehmann, A. et al.  
Fast evaluation of biopsy for prostate cancer diagnosis by Fraunhofer IKTS  
Presentation (author)
- 19th World Conference on Non-Destructive Testing – WCNDT 2016**, Munich, 13.–17.6.2016
- Barth, M. et al.  
Inspection of forged disc materials with an adapted annular array and dynamic depth focusing  
Presentation (author)
- Barth, M. et al.  
Testing of ceramics by ultrasound microscopy and vibration analysis  
Presentation (author)
- Bendjous, B. et al.  
Determination of biomass by laser-speckle-photometry  
Poster (author)
- Chapny, T.; Schreiber, J. et al.  
Characterization of polymer-based materials using fluorescence method and fractal analysis  
Presentation (co-author)
- Cikalova, U. et al.  
Laser speckle photometry (LSP) – Optical sensor system for monitoring of material condition and processing  
Presentation (author)
- Gommlich, A. et al.  
On determination of focal laws for linear phased array probes as to the active and passive element size  
Presentation (author)
- Herzog, T. et al.  
New possibilities in ultrasound phased array testing by the use  
Poster (author)
- Hillmann, S. et al.  
Validation of an ultrasonic-phased-array-method for testing of circumferential welds at thin-walled pipes  
Presentation (author)
- Hipp, R.  
Operation and sound field of the ultrasonic biplanar-array  
Poster (author)
- Hönig, U.; Holder, U.; Pietzsch, A. et al.  
Definition of requirements for reference experiments to determine and evaluate various damage mechanisms in fibre composites by acoustic emission  
Presentation (co-author)
- Köhler, B. et al.  
A novel piezoelectric fibre patch transducer for shear horizontal wave modes  
Presentation (author)
- Kovalenko, D.; Opitz, J.  
Structural characterization by Raman spectroscopy  
Presentation (co-author)
- Richter, C. et al.  
Ultrasonic phased array system with 128 full parallel channels  
(128:128) for fast and modular automated testing  
Presentation (author)
- Schubert, F.  
Simulation of ultrasonic wave propagation in anisotropic heterogeneous welds embedded in a polycrystalline base material  
Presentation (author)
- Schulze, M. et al.  
NDE of carbon fiber based materials and polymers by the application of high frequency eddy-current techniques  
Presentation (author)
- Walter, S. et al.  
Comparison of ultrasonic phased array probes based on PMN-PT and PZT 1-3 composites  
Presentation (author)
- Sitzung der Fachgruppe “Integrierte Schaltungen” des Zentralverbandes der Deutschen Elektroindustrie**, Hermsdorf, 14.6.2016
- Capraro, B.  
Foliengießen am Fraunhofer IKTS  
Presentation (author)
- 4th Dresden Nanoanalysis Symposium “Materials Modeling and Characterization”**, Dresden, 15.6.2016
- Gluch, J. et al.  
Multilayer Laue lenses – Novel optics for nano X-ray tomography in a wide range of photon energy  
Presentation (author)
- Kutukova, K. et al.  
Crack imaging in composite materials using high resolution nano-XCT  
Presentation (author)
- Sander, C. et al.  
Advanced characterization methods for materials properties of composite BEoL stacks for multi-scale simulation  
Presentation (author)
- SUMMEREV 16: Characterisation of Hardmetals and Superhard Materials**, Liechtenstein, 16.–17.6.2016
- Pötschke, J. et al.  
Novel techniques for sample preparation for electron imaging technologies  
Presentation (author)
- 18th International Zeolite Conference**, Rio de Janeiro, 19.–24.6.2016
- Richter, H. et al.  
Designing of zeolite particles for mixed-matrix-membrane and heat storage application  
Poster (author)
- Schüle, M.; Lüdke, D.; Richter, H. et al.

- Carbon integrated zeolite membranes (CiZM) – A defect closing method  
Poster (co-author)
- Simon, A. et al.  
Improvement of zeolite membranes by deposition of amorphous carbon  
Poster (author)
- 18th International Meeting on Lithium Batteries – IMLB 2016**, Chicago, 19.–24.6.2016
- Reinke, C. et al.  
Electrochemical approach to investigate the electrolyte wetting process of lithium-ion cells  
Poster (author)
- Intersolar Europe + ees Europe Conference 2016**, Munich, 21.–22.6.2016
- Rost, A.  
Glass-ceramic solid electrolytes for lithium and sodium ion batteries  
Presentation (author)
- 5th International Conference on Structured Catalysts and Reactors – ICOSCAR5**, Donostia-San Sebastian, 22.–24.6.2016
- Hübner, M.; Petasch, U. et al.  
Potential of ceramic foams for DeNOx exhaust aftertreatment  
Poster (co-author)
- NanoTech Poland**, Poznan, 22.–25.6.2016
- Zschech, E. et al.  
Nano X-ray tomography – A novel technique to study nanomaterials and nanostructures  
Presentation (author)
- 17th European Conference for Composite Materials – ECCM17**, Munich, 26.–30.6.2016
- Krug, M. et al.  
Evaluation of alumina as protective coating for carbon fibers in aluminum-based composites  
Presentation (author)
- 9th International Conference on High Temperature Ceramic Matrix Composites and Global Forum on Advanced Materials and Technologies for Sustainable Development – HTC MC 2016**, Toronto, 26.6.–1.7.2016
- Klemm, H. et al.  
Hot gas stability of various ceramic matrix composites  
Presentation (author)
- Kunz, W. et al.  
Self-healing EBC material for gas turbine applications  
Presentation (author)
- Electroceramics XV**, Limoges, 27.–29.6.2016
- Molin, C. et al.  
PMN-8PT thick film and multi-layer ceramic devices for electrocaloric cooling applications  
Presentation (author)
- 3. ThEEN-Treff**, Hermsdorf, 29.6.2016
- Capraro, B.  
Folientechnik für mobile Stromspeicher  
Presentation (author)
- 30th International Conference on Surface Modification Technologies – SMT30**, Milan, 29.6.–1.7.2016
- Weiser, M. et al.  
Characterization of the electrolytic deposition of particle reinforced metal layers by electrochemical quartz crystal micro balance  
Poster (author)
- ASCO Annual Meeting – ASCO16**, Chicago, 3.–7.7.2016
- Lehmann, A. et al.  
Fast evaluation of biopsy for prostate cancer diagnosis by Fraunhofer IKTS  
Presentation (author)
- AFC IA Annex 32 (Solid Oxide Fuel Cells)**, Lucerne, 4.7.2016
- Megel, S. et al.  
Update on SOFC/SOEC Technology in Germany  
Presentation (author)
- Kongress QS Excellence 2016**, Bad Nauheim, 5.–6.7.2016
- Wunderlich, C.  
Innovative zerstörungsfreie in-line Methoden zur Qualitätssicherung im Umfeld von Industrie 4.0  
Invited presentation (author)
- 12th European SOFC & SOEC Forum – EFCF 2016**, Lucerne, 5.–8.7.2016
- Henke, M.; Steilen, M.; Näke, R. et al.  
Control strategy for a SOFC gas turbine hybrid power plant  
Presentation (co-author)
- Kusnezoff, M. et al.  
Status of SOFC/SOEC stack and system development and commercialization activities at Fraunhofer IKTS  
Presentation (author)
- Megel, S. et al.  
CFY-stacks: Progress in development  
Poster (author)
- Pfeifer, T. et al.  
Development of a SOFC/battery-hybrid system for distributed power generation in India  
Presentation (author)
- Schilm, J. et al.  
Glass ceramic sealants for CFY based SOFC  
Presentation (author)
- 14th International Conference on Inorganic Membranes – ICIM 2016**, Atlanta, 10.–13.7.2016
- Hoffmann, R. et al.  
Electrostatically supported spray coating to improve oxygen permeation of  $(\text{Ba}_{0.5}\text{Sr}_{0.5})(\text{Co}_{0.8}\text{Fe}_{0.2})\text{O}_{3-\delta}$ -capillaries  
Poster (author)
- Kiebach, R.; Agerstedt, K.; Hu, Q.; Hendriksen, P.V.; Engelbrecht, K.; Sogaard, M.; Pippardt, U.; Kiesel, L. et al.  
Lessons learned from designing and operating a proof-of-concept module with 25 tubular oxygen transport membranes  
Presentation (co-author)
- Reger-Wagner, N. et al.  
Reduction of defects in zeolite membranes by chemical vapor deposition technique  
Presentation (author)
- Simon, A. et al.  
Synthesis of carbon nanotubes and carbon nanofibers on asymmetric porous ceramic substrates  
Presentation (author)
- Voigt, I. et al.  
Efficient oxygen separation from air with MIEC-membranes  
Presentation (author)
- Voigt, I. et al.  
NF-Membranes for the cleaning of "Recycle water" in oil sand extraction  
Poster (author)
- 24. Seminar des "Arbeitskreises Elektrochemie in Sachsen"**, Chemnitz, 11.7.2016
- Lämmel, C. et al.  
Leckraten von Ag/AgCl-Referenzelektroden und die Verwendung in elektrochemischen Messungen  
Presentation (author)
- Voigt, K. et al.  
Oxidbildung und Wärmeentwicklung bei stromkontrollierter Pulsanodisation von Aluminium  
Presentation (author)
- 5th International Symposium on Graphene Devices – ISGD-5**, Brisbane, 11.–14.7.2016
- Liao, Z.; Dianat, A.; Gall, M. et al.  
In-situ stretching graphene ribbons in the transmission electron microscope  
Presentation (co-author)
- IMWA Annual Conference 2016: "Mining meets Water – Conflicts and Solutions" – IMWA 2016**, Leipzig, 11.–15.7.2016
- Friedrich, H.-J.  
Membraneelektrolyseverfahren zur Behandlung von und zur Rohstoffgewinnung aus Bergbau- und Tiefenwässern  
Presentation (author)
- World Federation of NDE Centers Short Course – WFNDEC**, Atlanta, 16.–17.7.2016
- Köhler, B.  
Measurement Methods #1: Visualization of sound fields: From August Toeplers Schlieren Method to laser vibrometry  
Invited presentation (author)
- Köhler, B.  
Wavefield visualization: Applications  
Invited presentation (author)
- 43rd Review of Progress in Quantitative Nondestructive Evaluation – QNDE 2016**, Atlanta, 16.–22.7.2016
- Köhler, B. et al.  
Course of studies for non-destructive testing at Dresden International University  
Presentation (author)
- Köhler, B. et al.  
Elastic wave fields generated by shear horizontal piezoelectric fiber patch (SH-PFP) transducers: Parameter study by modelling and laser vibrometric measurements  
Presentation (author)
- Kopycynska-Müller, M. et al.  
Novel approach in mechanical characterization of thin films for nano electronics  
Presentation (author)
- Löffler, M.; Zschech, E. et al.  
Multi-scale X-ray tomography of solder interconnects in microelectronics  
Presentation (co-author)
- Michaelis, A.  
New NDE methods for quality assessment of advanced ceramic materials and systems  
Presentation (author)
- Rjelka, M.  
Extraction of depth profiles of third order elastic constants in cracked media  
Presentation (author)
- 6th International Conference on Shaping of Advanced Ceramics – Shaping VI**, Montpellier, 18.–20.7.2016
- Abel, J. et al.  
Influence of PE type in Ceramic Injection Molding (CIM) feedstocks towards the solvent extractability of green bodies  
Presentation (author)

## NAMES, DATES, EVENTS

- Schwarzer, E. et al.  
Application instances based on different materials made by lithography-based ceramic manufacturing (LCM)  
Presentation (author)
- Schwarzer, E. et al.  
Thermoplastic 3D-printing (T3DP) – Update in the field of additive manufacturing of single- and multi-material components  
Presentation (author)
- 15th Ulm Electrochemical Talks – UECT 2016**, Blaubeuren, 20.–21.7.2016
- Rost, A. et al.  
Impedance spectroscopy on glass-ceramic solid-state electrolytes for room temperature Na-S batteries  
Presentation (author)
- 16th International Conference on Atomic Layer Deposition – ALD 2016**, Dublin, 24.–27.7.2016
- Sundqvist, J.  
Industry panel on atomic level processing  
Presentation (author)
- Suyatin, D. B.; Khan, S. A.; Sundqvist, J. et al.  
Longitudinal nanowire splitting by atomic layer etching  
Presentation (co-author)
- Microscopy & Microanalysis Meeting – M&M 2016**, Columbus/OH, 24.–28.7.2016
- Gluch, J.  
FIB sample preparation for X-ray microscopy and ROI target cross-sectioning  
Presentation (author)
- Gordon Research Conference**, South Hadley, 31.7.–5.8.2016
- Michaelis, A.  
(AM): Advanced Manufacturing and Additive Manufacturing  
Presentation (author)
- 11th International Symposium on Electrochemical Micro & Nanosystem Technologies – EMNT 2016**, Brussels, 17.–19.8.2016
- Heubner, C. et al.  
Electrochemical in situ preparation and characterization of sub-micron sized-NaFePO<sub>4</sub>  
Presentation (author)
- Schneider, M. et al.  
Microelectrochemical investigation of AA2024  
Presentation (author)
- Weiser, M. et al.  
Platinum nanoparticle electro-deposition from a halogen-free electrolyte for catalytically active coatings  
Presentation (author)
- 7th International Zeolite Membrane Meeting – IZMM 2016**, Dalian, 20.–23.8.2016
- Voigt, I. et al.  
Scale-up manufacturing and testing of microporous membranes  
Presentation (author)
- 6th International Congress on Ceramics – ICC6**, Dresden, 21.–25.8.2016
- Abel, J. et al.  
Aluminum alloy tools in Ceramic Injection Molding (CIM) for testing sample series  
Presentation (author)
- Ahlhelm, M. et al.  
Novel ceramic composites for personalized 3D structures  
Presentation (author)
- Beckert, W. et al.  
Modelling support for development of ceramic thermo-electric applications  
Presentation (author)
- Chen, L. et al.  
Crack detection of ceramics based on laser speckle photometry  
Poster (author)
- Eberstein, M. et al.  
On the development of ceramic functional inks for high definition 3D printed electronics  
Presentation (author)
- Feng, B. et al.  
Fabrication and characterization of ceramic thermoelectric modules based on boron carbide and titanium suboxide  
Presentation (author)
- Füssel, A. et al.  
Advancement of open-celled SSIC foams for high temperature application  
Presentation (author)
- Gast, F.-U.; Schwinge, C.; Bohatzsch, T.; Ahlhelm, M. et al.  
Testing of polymer-based ceramics as bone replacement material in additive manufacturing  
Presentation (co-author)
- Glöß, B. et al.  
Influence of granule properties on die filling behavior  
Presentation (author)
- Heinig, K.-H. et al.  
Ceramic-ceramic nanocomposites by melt quenching – How does it work and what are they good for?  
Presentation (author)
- Herrmann, M. et al.  
Diamond, cBN reinforced ceramic materials: Potential wear resistant components  
Presentation (author)
- Hillmann, S. et al.  
Current state of research of non-destructive methods for ceramic materials  
Presentation (author)
- Kaiser, A. et al.  
Characterization of high temperature materials properties and processes by heating microscopy under high purity atmospheres and high vacuum  
Presentation (author)
- Kaiser, S. et al.  
Development of three-dimensional catalytically active fiber structures for heterogeneous catalysis  
Presentation (author)
- Kentaro, I.; Richter, H.-J. et al.  
Preparation of aluminium titanate-based porous ceramics using 3D printing as green process  
Presentation (co-author)
- Kinski, I. et al.  
Characterization and development of ceramic phosphors for light-conversion  
Presentation (author)
- Klemm, H. et al.  
Design of non-oxide ceramic matrix composites for gas turbine applications  
Presentation (author)
- Köhler, B.  
A duality: Elastodynamic testing for ceramics and ceramics for elastodynamic based non-destructive testing  
Presentation (author)
- Krell, A. et al.  
New horizons beyond glass-optics: Transparent ceramics with advanced optical quality  
Presentation (author)
- Kusnezoff, M. et al.  
Status and perspectives of SOFC technology  
Presentation (author)
- Mannschatz, A. et al.  
Conductive glass-carbon composites for heaters produced by powder injection molding (PIM)  
Presentation (author)
- Marcinkowski, M. et al.  
Development of ceramic functional films for curing at 200 °C on planar and non-planar surfaces  
Presentation (author)
- Martin, H.-P. et al.  
Technological options to tune electrical conductivity of titanium suboxide – An experimental approach  
Presentation (author)
- Mühle, U. et al.  
Target preparation and characterization of interfaces in cosintered metal ceramic composites  
Presentation (author)
- using imaging and analytical transmission electron microscopy  
Presentation (author)
- Nikolowski, K. et al.  
Novel approach to optimize high voltage spinel materials for lithium-ion batteries via the synthesis procedure  
Presentation (author)
- Petasch, U. et al.  
Potential of open-celled ceramic foams for DeNOx exhaust after-treatment  
Poster (author)
- Pohl, M. et al.  
Tailor-made silver pastes for functional LTCC applications  
Presentation (author)
- Räthel, J. et al.  
Flash sintering by the use of hybrid heated FAST/SPS technique  
Presentation (author)
- Reichelt, E. et al.  
Application of ceramics for the sustainable production of chemical products  
Presentation (author)
- Reinhardt, K. et al.  
Shear tinning and thixotropic properties of thick film pastes and their effects on printing performance  
Presentation (author)
- Reuber, S. et al.  
Ceragen fuel cells for off-grid and residential power  
Presentation (author)
- Rost, A. et al.  
Joining of ceramic based TEG-modules  
Presentation (author)
- Scheithauer, U. et al.  
Combination of green tape cast and extruded components for new lightweight kiln furniture  
Presentation (author)
- Scheithauer, U. et al.  
Suspension based additive manufacturing of single- and multi-material components  
Presentation (author)
- Schulz, M. et al.  
Stiff plastic extrusion of sodium beta alumina ceramic electrolytes  
Presentation (author)
- Semu, D. et al.  
Open-celled ceramic foams as functional structures for multi-phase chemical reactors  
Poster (author)
- Vinnichenko, M. et al.  
Basic aspects of matrix materials stability for application in molten carbonate fuel cells  
Presentation (author)

- Wagner, D. et al.  
Glass-ceramic solid electrolytes for room temperature sodium ion batteries  
Presentation (author)
- Zeh, C. et al.  
Ceramic phosphors for direct part making and sensor applications  
Presentation (author)
- 2016 Joint IEEE International Symposium on the Applications of Ferroelectrics, European Conference on Applications of Polar Dielectrics & Workshop on Piezoresponse Force Microscopy – ISAF/ECAPD/PFM**, Darmstadt, 21.–25.8.2016
- Gebhardt, S. et al.  
Study on electrocaloric multilayer ceramics based on PMN-8PT  
Presentation (author)
- Günther, P. et al.  
Fabrication and characterization of a 20 MHz ultrasonic transducer using soft mold process  
Presentation (author)
- 67th Annual Meeting of the International Society of Electrochemistry**, The Hague, 21.–26.8.2016
- Heubner, C. et al.  
Harmonics analysis for investigation of insertion electrodes  
Poster (author)
- Langklotz, U. et al.  
Silicon-Nanowire anodes for lithium batteries synthesized from galvanic gold nanoparticles  
Presentation (author)
- Ponussamy, P.; Feng, B. et al.  
Effect of TiB<sub>2</sub> in boron rich boron carbide for TE applications  
Poster (co-author)
- 16th Nordic Filtration Symposium**, Lappeenranta, 24.–26.8.2016
- Richter, H. et al.  
Ceramic nanofiltration membranes  
Presentation (author)
- 30th European Crystallographic Meeting**, Basel, 28.8.–1.9.2016
- Münchgesang, W.; Wagner, D. et al.  
Crystal structure, microstructure and ionic conductivity of the cost-efficient sodium solid electrolyte Na<sub>3</sub>YSi<sub>4</sub>O<sub>12</sub>  
Presentation (co-author)
- Fachtagung "Biogas aus Stroh"**, Heiden, 30.8.2016
- Schwarz, B.  
Stroh-basierte Biogaspellets als alternatives Inputsubstrat in Biogasanlagen  
Presentation (author)
- EUROSENSORS XXX**, Budapest, 4.–7.9.2016
- Lenz, C. et al.  
Development and characterization of a miniaturized flame ionization detector in ceramic multilayer technology for field applications  
Presentation (author)
- 2016 Asian SOFC Symposium**, Tokyo, 4.–7.9.2016
- Pfeifer, T. et al.  
Development of a SOFC/Battery-hybrid system for distributed power generation in India  
Presentation (author)
- 15th European Inter-Regional Conference on Ceramics**, Villeurbanne, 5.–7.9.2016
- Johannes, M. et al.  
Nanostructured zirconia composites with high ageing resistance  
Poster (author)
- ProcessNet-Jahrestagung**, Aachen, 12.–15.9.2016
- Koleva, V.; Richter, H. et al.  
Energieeffiziente Stofftrennung in der chemischen und pharmazeutischen Industrie durch Membranverfahren  
Presentation (co-author)
- 6th Electronics System-Integration Technology Conference – ESTC 2016**, Grenoble, 13.–16.9.2016
- Goldberg, A. et al.  
Highly efficient and long-term stable fuel cell micro-energy systems based on ceramic multilayer technology  
Presentation (author)
- 2. Wasseranalytisches Seminar – MWAS 2016**, Mülheim on the Ruhr, 14.–15.9.2016
- Oelschlägel, K. et al.  
Weathering of microplastics  
Poster (author)
- 23rd International Congress on X-ray Optics and Microanalysis – ICXOM23**, Upton, 14.–18.9.2015
- Niese, S. et al.  
A dedicated illumination for full-field X-ray microscopy with multilayer Laue lenses  
Presentation (author)
- IEEE International Ultrasonics Symposium – IUS 2016**, Tours, 18.–21.9.2016
- Gebhardt, S. et al.  
Towards fabrication of high frequency ultrasonic transducers using soft mold process  
Presentation (author)
- Wang, H.; Qiu, Y.; Démoré, C.; Gebhardt, S. et al.
- 2-D crossed-electrode transducer arrays for ultrasonic particle manipulation  
Presentation (co-author)
- 18. Heiligenstädter Kolloquium "Technische Systeme für die Lebenswissenschaften"**, Heilbad Heiligenstadt, 19.–21.9.2016
- Heuer, H.  
Kombinierte akustische und induktiv elektrische Impedanz-Spektroskopie zur zeitlichen Beobachtung biochemischer Prozesse  
Presentation (author)
- 27. European Symposium on the Reliability of Electron Devices, Failure Physics and Analysis – ESREF**, Halle, 19.–22.9.2016
- Huang, J.; Löffler, M.; Möller, W.; Zschech, E.  
Ga contamination in silicon by focused ion beam milling: Dynamic model simulation and atom probe tomography experiment  
Presentation (co-author)
- 55. Chemiefasertagung Dornbirn-MFC**, Dornbirn, 20.–22.9.2016
- Herfert, H.; Moritz, T.  
CerMeTex – Neuartige Metallfaser-Keramik-Verbundwerkstoffe für Bauteileigenschaften auf Basis von Metallfaser- und Metallfilamentstrukturen  
Presentation (author)
- 14th European Conference on Thermoelectrics – ECT 2016**, Lisbon, 20.–23.9.2016
- Feng, B. et al.  
Technological options to tune electrical conductivity of titanium suboxide – An experimental approach  
Presentation (author)
- Rost, A. et al.  
Joining of ceramic based TEG-modules  
Presentation (author)
- 4th International Symposium on New Frontier of Advanced Si-Based Ceramics and Composites – ISASC 2016**, Busan, 25.–28.9.2016
- Adler, J. et al.  
Silicon carbide based filter materials and concept for cost-effective flat membranes  
Invited presentation (author)
- Klemm, H.  
High-temperature silicon nitride with Sc<sub>2</sub>O<sub>3</sub> as sintering additive  
Invited presentation (author)
- 21st International Workshop on Electromagnetic Nondestructive Evaluation – ENDE 2016**, Lisbon, 25.–28.9.2016
- Cikalova, U. et al.  
New sensor development for Barkhausen noise technique  
Presentation (author)
- Cikalova, U. et al.  
Spatially resolved Barkhausen noise measurement of laser cut electrical steels  
Poster (author)
- 7th Late Summer Workshop "Microplastics in the aquatic environment"**, Haltern am See, 25.–28.9.2016
- Oelschlägel, K. et al.  
Characterization of microplastics  
Poster (author)
- 40th International Microelectronics and Packaging IMAPS Poland 2016 Conference**, Waldenburg, 25.–28.9.2016
- Ziesche, S. et al.  
Technological combination of multilayer ceramic technology and ceramic injection molding for the manufacturing of 3D functional ceramic components  
Presentation (author)
- AM CERAMICS 2016**, Nuremberg, 26.–27.9.2016
- Scheithauer, U. et al.  
Additive Fertigung keramischer Bauteile – Neue Designmöglichkeiten und Anwendungsbeispiele  
Presentation (author)
- 15th International Conference on Nanoimprint and Nanoprint Technology – NNT 2016**, Braga, 26.–28.9.2016
- Khan, S. A.; Graczyk, M.; Nilsson, N.; Kvennefors, A.; Huffmann, M.; Suyatin, D. B.; Sundqvist, J. et al.  
Atomic layer etching in nanoimprint stamp technology  
Poster (co-author)
- 2nd Graz Battery Days**, Graz, 27.–28.9.2016
- Nikolowski, K. et al.  
Material and process development for lithium bipolar batteries  
Poster (author)
- Wolter, M. et al.  
Application of ceramic technologies in all solid state batteries  
Invited presentation (author)
- Materials Science and Engineering – MSE 2016**, Darmstadt, 27.–29.9.2016
- Voigt, I. et al.  
Carbon coatings for membrane application and catalysis  
Presentation (author)
- Workshop "Keramische Schaltungsträger – Eine innovative Technologie nicht nur für Satel-**

## NAMES, DATES, EVENTS

- litenkommunikation**, Bonn, 29.9.2016
- Capraro, B.  
Casting und Slot – Die Technologien zur Herstellung keramischer Folien  
Vortrag (Autor)
- 14th International Baltic Conference on Atomic Layer Deposition – BALD 2016**, St. Petersburg, 2.–4.10.2016
- Puurunen, R. L.; Koshtyal, Y.; Pedersen, H.; van Ommen, J. R.; Yurkevich, O.; Sundqvist, J.  
On the history of ALD and the VPHA project  
Presentation (co-author)
- BMT 2016 “Dreiländertagung”**, Basel, 4.–6.10.2016
- Gebhardt, S. et al.  
Towards fabrication of high frequency ultrasonic transducers using soft mold process  
Presentation (author)
- 3rd Annual InkJet Conference 2016 – TheICJ**, Dusseldorf, 4.–6.10.2016
- Fritsch, M.  
Synthesis of particles inks for inkjet printing of microelectronic components  
Presentation (author)
- 2nd Ceramics Osaka – Highly-functional Ceramics Expo**, Osaka, 5.–7.10.2016
- Wunderlich, C.  
Advanced ceramics for high tech innovations: The Fraunhofer approach  
Invited presentation (author)
- Thermodynamik-Kolloquium 2016**, Kaiserslautern, 5.–7.10.2016
- Kriegel, R.  
Die selbstverdichtende Verbrennung – Ein Ansatz für eine effizientere Energieproduktion  
Presentation (author)
- 5th International Conference “Fractography of Advanced Ceramics”**, Smolenice, 9.–12.10.2016
- Herrmann, M. et al.  
Determination of defects, relevant for strength of ceramics, by non-destructive methods  
Invited presentation (author)
- World PM2016 Congress & Exhibition**, Hamburg, 9.–13.10.2016
- Günther, A. et al.  
Combining metal textiles with ceramics by injection molding for novel composites with promising properties  
Presentation (author)
- Höhn, M. et al.  
TiSiCN nanocomposite hard coatings by CVD  
Presentation (author)
- Lay, S.; Guyon, A.; Pötschke, J.  
Grain boundary segregation in sintered materials: Effect on densification and grain growth  
Poster (co-author)
- Pötschke, J. et al.  
Manufacturing and properties of polycrystalline WC-Co based cemented carbides  
Presentation (author)
- Fachtagung KMU-innovativ: IKT**, Hanover, 10.–11.10.2016
- von Dungern, F.; Tschöke, K.  
Entwicklung einer integrierten Strukturüberwachung für Faser-verbundbauteile im Automobil  
Poster (author)
- 3rd International Conference on In-Situ and Correlative Electron Microscopy – CISCEM 2016**, Saarbrücken, 11.–12.10.2016
- Sempf, K. et al.  
Quantifying the contrast mechanisms of a scanning electron microscope by an unique in-situ FESEM/AFM hybrid system  
Presentation (author)
- Workshop “Neue Materialien und Technologien für Smart Textiles”**, Weimar, 13.10.2016
- Krug, M.  
Atomlagenabscheidung (ALD) für funktionale Schichten auf textilen Strukturen  
Presentation (author)
- Vision 2016: Vehicle and infrastructure safety improvement in adverse conditions and night driving**, Paris, 13.–14.10.2016
- Hofmann, U.; von Wantoch, T.; Eberhardt, G.; Kinski, I. et al.  
Dynamic shaping of the basic intensity profile of an adaptive laser headlights based on resonant MEMS scanning mirrors  
Presentation (co-author)
- Biomaterials for Healthcare – BioMaH**, Rome, 17.–20.10.2016
- Ahlhelm, M. et al.  
Novel structural ceramic composites for individualized 3D-structures  
Presentation (author)
- Bionecton – Partnering Conference for Technology Transfer in Life Sciences**, Leipzig, 18.–19.10.2016
- Lehmann, A. et al.  
Das Fraunhofer IKTS als innovativer Partner im Bereich Bio- und
- Medizintechnik**  
Presentation (author)
- Lehmann, A.  
Spin-Off-Vorhaben des Fraunhofer IKTS: Optische Prostatakrebsdiagnose  
Presentation (author)
- r4-Innovative Technologie für Ressourceneffizienz – Bereitstellung wirtschaftsstrategischer Rohstoffe**, Hanover, 20.–21.10.2016
- Wufka, A.  
Entwicklung von keramischen Membran-Extraktionssystemen und Adaption von elektrochemischen Verfahren zur Gewinnung metallischer Rohstoffe  
Presentation and poster (author)
- IMAPS Herbstkonferenz 2016**, Munich, 20.–21.10.2016
- Gradmann, R. et al.  
Entwicklung funktioneller Glaswerkstoffe für den laserbasierten Sinterungsprozess in integrierten Sensorsystemen  
Presentation (author)
- Materials Science & Technology 2016 – MS&T, 16**, Salt Lake City, 23.–27.10.2016
- Scheithauer, U. et al.  
Combination of green tape cast and extruded components for new lightweight kiln furniture  
Presentation (author)
- Scheithauer, U. et al.  
Suspension based additive manufacturing of ceramic and metal-ceramic components  
Presentation (author)
- 6. Innovationstage 2016**, Bonn, 25.–26.10.2016
- Wufka, A.  
Aufbereitung von Prozesswasser aus der Bioethanolschlempe als Ersatz von Frischwasser  
Presentation (author)
- pades – Partikeldesign Thüringen – Symposium 2016**, Neudietendorf, 25.–26.10.2016
- Gleichmann, K.; Richter, H.  
Zeolithpartikeldesign für die Anwendung in der Stofftrennung und Wärmespeicherung  
Presentation (co-author)
- Jäger, B. et al.  
Oberflächenaktive Elektrokatalysatoren zur Wirkungsgraderhöhung bei der Wasserelektrolyse  
Presentation (author)
- Jäger, B. et al.  
Synthese und Applikation katalytisch aktiver Mischoxidpartikel  
Poster (author)
- Ommer, M.; Hoffmann, C.; Kolditz, K.; Richter, H. et al.  
Oberflächenmodifizierung von Zeolithmikropartikeln im Pulsationsreaktor (PR)  
Poster (co-author)
- Richter, H. et al.  
Membranen und Formkörper – Mixed-Matrix-Membranen  
Poster (author)
- IVG-Mitgliederversammlung**, Herne, 27.10.2016
- Kriegel, R.  
Sauerstoff für die Nutzung von Schwachgasen  
Presentation (author)
- GRDC Symposium**, Gangnam/Seoul, 31.10.–1.11.2016
- Opitz, J. et al.  
Material- and process-diagnostic for industrial applications  
Presentation (author)
- Weidl, R.  
Energy storage and power generation technologies at IKTS  
Presentation (author)
- Jahrestagung Forschungsvereinigung Feinmechanik, Optik und Medizintechnik F.O.M. e.V.**, Berlin, 2.11.2016
- Reichel, U. et al.  
Optokeramische Werkstoffe: Innovationspotenzial für vielfältige Anwendungen  
Poster (author)
- Testing, Characterisation and Filter Media 8: Conference and Exhibition**, Chester, 2.–3.11.2016
- Richter, H. et al.  
Ceramic membranes for large scale filter application  
Presentation (author)
- 16th Aachener Membran-Kolloquium**, Aachen, 2.–3.11.2016
- Weyd, M. et al.  
Zeolite NaA membranes for improved glycol dewatering in natural gas drying  
Presentation (author)
- 2. BMUB-Fachtagung “Klimaschutz durch Abwärmenutzung”**, Berlin, 3.11.2016
- Martin, H.-P. et al.  
Neue Optionen in der Abwärmenutzung mit keramischen Thermoelektrika  
Presentation (author)
- 8th International Symposium on NDT in Aerospace**, Bangalore, 3.–5.11.2016
- Heuer, H.  
NDT investigations on C/SiC samples from different manufactur-

- ing steps  
Presentation (author)
- 1st Workshop on rational design for improved functionalities of porous inorganic materials**, Cavaillon, 7.–9.11.2016
- Richter, H. et al.  
Designing of ceramic membranes for separation on molecular level  
Presentation (author)
- FloEFD Simulation Conference 2016**, Frankfurt a. Main, 8.–9.11.2016
- Stahn, M.  
Porous media flow – Use of FloEFD in the design process of ceramic membrane elements for cross-flow filtration  
Presentation (author)
- DKG-Fortbildungsseminar "Foliengieß- und Schlitzdüsen-Verfahren"**, Hermsdorf, 9.–10.11.2016
- Capraro, B.  
Casting and Slot-Die Technologien zur Herstellung keramischer Folien  
Presentation (author)
- Fritsch, M.  
Formulierung und Aufbereitung von Foliengießschlicker  
Presentation (author)
- Härtel, A. et al.  
Folienverbunde – Materialpaarungen, Optionen der Herstellung und Einsatzmöglichkeiten  
Presentation (author)
- China Intelligent Manufacturing International Conference – CIMIC 2016**, Jinan, 9.–11.11.2016
- Schwarz, B.  
Fraunhofer Gesellschaft – Close connection between research and industry – International co-operation on the way to intelligent manufacturing  
Presentation (author)
- 1st International Biomass Professional Forum: "Application and Development of sustainable Biomass Materials and Energy"**, Jinan, 10.–11.11.2016
- Schwarz, B.  
Möglichkeiten und Herausforderungen bei der Vergärung von Stroh  
Presentation (author)
- Advancer-Schulungsprogramm Hochleistungskeramik Teil III: Konstruktion, Prüfung**, Freiburg, 10.–11.11.2016
- Herrmann, M.  
Fehlerquellen bei der Herstellung keramischer Werkstoffe  
Presentation (author)
- Herrmann, M.  
Gefügedarstellung und Bewertung  
Presentation (author)
- ASME's International Mechanical Engineering Congress and Exposition – IMECE 2016**, Phoenix, 11.–17.11.2016
- Sukharev, V.; Kteyan, A.; Hovsepyan, H.; Choy, J.-H.; Mühle, U. et al.  
Chip-package-interaction stress induced carrier mobility shift in advanced Si nodes  
Presentation (co-author)
- 12th International Symposium on Electrochemical Machining Technology – INSECT 2016**, Brussels, 17.–18.11.2016
- Schneider, M. et al.  
ECM of an SiC-based ceramic – Passivation and Dissolution  
Presentation (author)
- Schneider, M. et al.  
The dissolution mechanism of tungsten carbide under ECM conditions  
Presentation (author)
- 5. Workshop "Lithium-Schwefel-Batterien"**, Dresden, 21.–22.11.2016
- Rost, A. et al.  
Glass-ceramic solid-state electrolytes for the use in Li-S batteries  
Poster (author)
- Symposium Anodisieren – Oxidschichten von hart bis smart**, Dresden, 24.–25.11.2016
- Lämmel, C. et al.  
Untersuchung wärmebedingter Beeinträchtigungen der Schichteigenschaften beim Hartanodisieren  
Presentation (author)
- Voigt, K. et al.  
In-operando Temperaturmessung bei der plasmalektrolytischen Oxidation von Aluminium  
Presentation (author)
- 16. Sitzung des Arbeitskreises Bio-keramik**, Hermsdorf, 25.11.2016
- Menzel, M.; Johannes, M.  
Individualisiertes Dentalimplantat  
Presentation (co-author)
- 2016 MRS Fall Meeting & Exhibit**, Boston, 27.11.–2.12.2016
- Fritsch, M. et al.  
Synthesis, formulation and rapid curing of particles based inkjet and aerosol-jet printed films for electronic and sensory devices  
Poster (author)
- Vinnichenko, M. et al.  
Millisecond laser functionalization of the structures prepared using wet chemical deposition  
Presentation (author)
- Der Geothermiekongress 2016**, Essen, 29.11.–1.12.2016
- Friedrich, H.-J. et al.  
Elektrochemische Abtrennung scalingrelevanter Schwermetalle und Radionuklide aus geothermischen Tiefenwässern  
Invited presentation (author)
- 5. Deutsch-Polnisches PhD-Seminar "Advanced Materials Science"**, Schmochitz, 30.11.2016
- Michaelis, A.  
Advanced ceramics for disruptive innovations  
Presentation (author)
- DKG Herbstsymposium 2016**, Erlangen, 30.11.–1.12.2016
- Capraro, B. et al.  
Überblick über moderne Foliengießverfahren am Fraunhofer IKTS für innovative Anwendungen  
Invited presentation (author)
- Eberstein, M. et al.  
Rheologie als Schlüssel für Druckverhalten und Funktionseigenschaften neuer Dickschichtpasten  
Presentation (author)
- Karlsruher Werkstoff-Kolloquium**, Karlsruhe, 6.12.2016
- Michaelis, A.  
Keramische Werkstoffe für die Energie und Umwelttechnologie  
Presentation (author)
- 5. Stiftungstagung des DECHEMA-Forschungsinstituts**, Frankfurt a. Main, 7.12.2016
- Schneider, M.  
Plasmaanodisieren als keramische Oberflächentechnologie  
Presentation (author)
- 6. Dresdner Werkstoffsymposium**, Dresden, 8.–9.12.2016
- Michaelis, A.  
In operando non-destructive evaluation techniques for additive manufacturing  
Presentation (author)
- 4th Cellular Materials – CellMAT 2016**, Dresden, 7.–9.12.2016
- Füssel, A. et al.  
Property adjustment of open-celled ceramic foams for high temperature applications assisted by numerical modelling  
Presentation (author)
- Haase, D. et al.  
TiO<sub>2</sub> coatings on ceramic foams for photocatalytic applications  
Presentation (author)
- Walther, G.; Kieback, B.; Büttner, T.; Gaitzsch, U.; Kolvenbach, R.; Weißgärber, T.; Lincke, M.  
Metal foam for applications in heterogeneous catalysis and biogas desulfurization  
Presentation (co-author)
- Expertenpanel "Biomaterialien"**, Mainz, 8.12.2016
- Johannes, M. et al.  
Bioinerte Oxidkeramiken für dentale und endoprothetische Anwendungen  
Presentation (author)
- **Teaching activities of IKTS employees**  
-----
- Dr. Eberstein, M.**  
Lecture  
"Dickschichttechnik"  
TU Bergakademie Freiberg, Institut für Keramik, Glas- und Baustofftechnik (16.6.2016)
- Dr. Fries, M.**  
Lecture  
"Granulationsverfahren und Granulatcharakterisierung in der keramischen Industrie"  
TU Bergakademie Freiberg (9.6.2016)
- Dr. Fries, M.; Bales, A.; Dr. Eckhard, S.; Lenzner, K.**  
Practical training  
"Demonstrationspraktikum Pulveraufbereitung: Technologie – Granulatcharakterisierung – Instrumentierte Pressverdichtung"  
IKTS Dresden (31.5.2016, 28.6.2016)
- Dr. Härtling, T.**  
Lecture and seminar  
"Nanotechnologie und Nanoelektronik"  
TU Dresden, Fakultät Elektrotechnik und Informationstechnik (SS2016)
- Jun.-Prof. Heuer, H.**  
Lecture  
"Systeme für die zerstörungsfreie Prüfung und Strukturüberwachung"  
TU Dresden, Fakultät Elektrotechnik und Informationstechnik, Institut für Aufbau- und Verbindungstechnik der Elektronik IAVT (WS2016/2017)
- Jun.-Prof. Heuer, H.**  
Lecture  
"Textile Werkstoffe und Prüftechnik/ Textile Faserstoffe und Prüftechnik"  
TU Dresden, Fakultät Maschinenwesen, Institut für Textilmaschinen und Textile Hochleistungswerkstofftechnik (SS2016)
- Jun.-Prof. Heuer, H.**  
Lecture  
"Zerstörungsfreie Prüfung elektronischer Baugruppen"  
TU Dresden, Fakultät Elektrotechnik und Informationstechnik, Zentrum

## NAMES, DATES, EVENTS

für mikrotechnische Produktion (WS2016/2017)

**Dr. Höhn, S.**

Lecture  
"Keramographie", im Rahmen der Lehrveranstaltung "Metallografie" TU Dresden, Institut für Werkstoffwissenschaft (1.2.2016)

**Dr. Jahn, M.**

Lecture, tutorial and practical training "Brennstoffzellensysteme und Elektrolyse" im Rahmen des Studienganges "Regenerative Energiesysteme" TU Dresden, Institut für Werkstoffwissenschaft (WS2016/2017)

**Dr. Jahn, M.**

Lecture  
"Fischer-Tropsch-Synthese – Stand der Technik und aktuelle Entwicklungen zum Einsatz alternativer Rohstoffe" im Rahmen der Lehrveranstaltung "Mehrphasenreaktionstechnik" TU Dresden (4.7.2016)

**Dr. Kriegel, R.**

Lecture  
"Grundlagen analytischer Untersuchungsmethoden" im Wissenschaftlichen Kolleg des Studienganges "Baustoffingenieurwesen" Bauhaus-Universität Weimar (WS2016/2017)

**Prof. Meyendorf, N.**

Lecture and practical training "Mikro- und Nano-NDE" TU Dresden, Institut für Aufbau- und Verbindungstechnik der Elektronik IAVT (WS2016/2017)

**Prof. Meyendorf, N.**

Lecture  
"NDE and SHM" University of Dayton, UD-Fraunhofer Project Center (SS2016)

**Prof. Meyendorf, N.**

Lecture  
"Nano characterization" University of Dayton, UD-Fraunhofer Project Center (SS2016)

**Prof. Meyendorf, N.**

Complex lecture  
"NDE and SHM" University of Dayton, General Electrics Aerospace, Cincinnati (2016)

**Prof. Michaelis, A.;**

**Dr. Kusnezoff, M.;**

**Dr. Neumeister, P.;**

**Dr. Rebenklau, L.**

Lecture  
"Keramische Funktionswerkstoffe" TU Dresden, Institut für Werkstoffwissenschaft (SS2016)

**Prof. Michaelis, A.**

Lecture and practical training "Keramische Werkstoffe" TU Dresden, Institut für Werkstoffwissenschaft (SS2016)

**Prof. Michaelis, A.;** **Dr. Kinski, I.;**  
**Dr. Herrmann, M.;** **Dr. Klemm, H.;**  
**Dr. Moritz, T.;** **Dr. Potthoff, A.;**

**Dr. Gestrich, T.;** **Dr. Kusnezoff, M.;**  
**Dr. Neumeister, P.;** **Dr. Partsch, U.;**  
**Dr. Langklotz, U.**

Lecture  
"Prozesse – Gefüge – Eigenschaften keramischer Werkstoffe" TU Dresden, Institut für Werkstoffwissenschaft (WS2016/2017)

**Dr. Moritz, T.**

Lecture  
"Keramikspritzgießen" TU Bergakademie Freiberg (30.6.2016)

**Dr. Moritz, T.**

Lecture series  
"Grundlagen der Technischen Keramik" Kunsthochschule Halle, Burg Griebichenstein (SS2016)

**Dr. Mühle, U.**

Lecture  
"Industrielle Halbleiterfertigung" TU Bergakademie Freiberg, Fakultät Werkstoffwissenschaft und Werkstofftechnologie (WS2016/2017)

**Dr. Mühle, U.**

Lecture  
"Spezielle Methoden der Mikrostrukturanalytik" TU Bergakademie Freiberg, Fakultät Werkstoffwissenschaft und Werkstofftechnologie (SS2016)

**Dr. Opitz, J.**

Lecture  
"Biomolekulare Nanotechnologie" "Introduction to Nanotechnology" TU Dresden, Max-Bergmann-Zentrum, Institut für Werkstoffwissenschaft TU Dresden, BIOTEC (WS2016/2017)

**Dipl.-Ing. Metasch, R.**

Practical training in the course of the lecture  
"Micro-/nanomaterials and reliability aspects"

TU Dresden, Fakultät Elektrotechnik, Institut für Aufbau- und Verbindungstechnik (WS2016/2017)

**Dr. Schneider, M.**

Lecture  
"Rastersondenmikroskopie/AFM" im Rahmen der Lehrveranstaltung Materialdiagnostik TU Dresden, Institut für Werkstoffwissenschaft (6.7.2016)

**Prof. Stelter, M.**

Lecture  
"Technische Chemie I / II" Friedrich-Schiller-Universität Jena (SS2016; WS2016/2017)

**Prof. Stelter, M.**

Lecture  
"Technische Umweltchemie" Friedrich-Schiller-Universität Jena (SS2016; WS2016/2017)

**Prof. Stelter, M.**

Lecture  
"Energiesysteme – Materialien und Design"

Friedrich-Schiller-Universität Jena (WS2016/2017)

**Dr. Voigt, I.**

Lecture and practical training "Keramische Verfahrenstechnik" Ernst-Abbe-Hochschule Jena, MA-Studiengang Werkstofftechnik (WS 2016/2017)

**Dr. Voigt, I.**

Lecture and practical training "Membranen und Membranverfahrenstechnik" Friedrich-Schiller-Universität Jena, MA-Studiengang Chemie-Energie-Umwelt (WS 2016/2017)

**Dr. Weyd, M., Pflieger, C.**

Lecture  
"Filtration with ceramic membranes" University of Connecticut, Storrs, USA, Seminar (3.2.2016)

**Dr. Zins, M.**

Lecture  
"Metalle, Kunststoffe, Keramiken – Technische Keramik als Leichtbaustoff" TU Dresden, Institut für Werkstoffwissenschaft (WS2016/2017)

**Prof. Zschech, E.;** **Prof. Stamm, M.;**  
**Dr. Mühle, U.;** **Dr. Rosenkranz, R.;**  
**Dr. Kopycinska-Müller, M.**

Lecture and practical training "Physical Characterization of Organic and Organic-Inorganic Thin Films" TU Dresden, Institut für Angewandte Photophysik (WS2016/2017)

**Prof. Zschech, E.;**

**Dr. Kopycinska-Müller, M.**

Lecture  
"Microscopy for Nondestructive methods classes" Master course in English Non-Destructive Testing M. Sc. (NDT) DIU Dresden International University (2016)

**Prof. Zschech, E.;** **Dr. Gall, M.;**

**Dr. Aubel, O.**

Lecture  
Master's Program Nanoelectronic Systems  
Module "Semiconductor Industry Challenges: Market Dynamics – Technology Innovations – Yield and Reliability Engineering" Lecture: "Reliability Engineering and Kinetics of Degradation Processes in Advanced Electronics" TU Dresden, Fakultät Elektrotechnik und Informationstechnik, Institut für Halbleiter- und Mikrosystemtechnik (WS2016/2017)

### ----- Participation in bodies and technical committees -----

#### Bodies

**Dr. Berger, L.-M.**

- Editorial Board of the Journal "Surface Engineering", Maney

Publishing

- Editorial Board of the Journal "Materials Performance & Characterization", ASTM International

**Dr. Gall, M.**

- IEEE Transactions on Device and Materials Reliability – TDMR, Editor  
- IEEE International Interconnect Technology Conference – IITC, Technical Committee  
- IEEE International Reliability Physics Symposium – IRPS, Technical Committee  
- International Conference on Reliability and Stress-Related Phenomena – IRSP, Technical Committee  
- Fraunhofer Nanotechnology Alliance  
- European Society of Thin Films (EFDS)

**Dr. Härtling, T.**

- AMA Association for Sensors and Measurement, Representative

**Dr. Kinski, I.**

- American Ceramic Society – ACerS  
- Deutsche Gesellschaft für Kristallographie – DGK  
- Materials Research Society – MRS

**Dr. Köhler, B.**

- Editor-in-Chief of the Journal "Case Studies in Nondestructive Testing and Evaluation", Elsevier Verlag

**Dr. Kusnezoff, M.**

- Fraunhofer Energy Alliance, Representative  
- SOFC Symposium of ICACC Conference Series organized by American Ceramic Society in Daytona Beach, Organizer  
- VDMA Working Group High Temperature Fuel Cells, Coordinator  
- European Fuel Cell Forum EFCE, Scientific Advisory Committee

**Dr. Martin, H.-P.**

- KMM-VIN, European Virtual Institute on Knowledge-based Multifunctional Materials

**Prof. Meyendorf, N.**

- Editor-in-Chief of the "Journal of Nondestructive Evaluation", Springer Verlag  
- Publication series "Dresdner Beiträge zur zerstörungsfreien Prüftechnik", Wolter, K.-J. (Hrsg.); Meyendorf, N. (Hrsg.); Heuer, H. (Hrsg.); Dresden: TUDpress, Start 2010  
- DGZfP – German Society for Non-Destructive Testing  
- ASNT – The American Society for Nondestructive Testing  
- SPIE – the international society for optics and photonics  
- Joint Lab Berlin, Technical Safety  
- UD-Fraunhofer Joint Research Center, Co-Director

**Prof. Michaelis, A.**

- Editorial Board of the "International Journal of Materials Research", Hanser Verlag



- Editorial Board of the "Journal of Ceramic Science and Technology", Göller Verlag
- Publication Series "Competencies in Ceramics", Michaelis, A. (Hrsg.), Stuttgart: Fraunhofer Verlag, Start 2006
- Publication Series "Kompetenzen in Keramik und Umweltverfahrenstechnik", Michaelis, A. (Hrsg.), Stuttgart: Fraunhofer Verlag, Start 2008
- Publication Series "Applied Electrochemistry in Material Science", Michaelis, A. (Hrsg.); Schneider, M. (Hrsg.), Stuttgart: Fraunhofer Verlag, Start 2009
- AGEF e. V. Institute at Heinrich-Heine-Universität, Arbeitsgemeinschaft Elektrochemischer Forschungsinstitutionen e. V.
- American Ceramic Society – ACerS
- Ceramic and Glass Industry Foundation (CGIF), Member Board of Trustees CGIF
- DECHEMA Society for Chemical Engineering and Biotechnology
- DECHEMA working group "Angewandte Anorganische Chemie"
- Deutscher Hochschul-Verband
- DGM German Society for Materials Research
- DKG Deutsche Keramische Gesellschaft / German Ceramic Society, Member of executive board, Chairman of the research advisory board, Director of the scientific works
- DPG Deutsche Physikalische Gesellschaft
- DRESDEN-concept e. V.
- Dresdner Gesprächskreis der Wirtschaft und der Wissenschaft e. V.
- Energy advisory council of the Wirtschaftsministeriums Sachsen
- EPMA European Powder Metallurgy Association
- Fraunhofer AdvanCer Alliance, Spokesperson
- Evaluation team "Interne Programme" of the Fraunhofer-Gesellschaft, Chairman
- GreenTec Awards, Member of the jury
- Helmholtz-Zentrum Dresden-Rossendorf
- IFW Dresden e. V.
- Materials Research Network Dresden MFD, Executive board
- Meyer Burger (Germany) AG, Supervisory board
- NOW GmbH, Beirat
- Silicon Saxony e. V.
- Solarvalley Mitteldeutschland e. V.
- "World Academy of Ceramics" WAC

#### Dr. Moritz, T.

- European Network of Material Research Institutes (ENMat), President

#### Dr. Opitz, J.

- American Ceramic Society – ACerS

#### Dr. Richter, H.

- International Zeolite Association
- American Ceramic Society – ACerS

#### Dr. Röllig, M.

- ZIM-Netzwerk "Zuverlässige Leistungselektronik", Berlin, technical council of the network management

#### Dr. Schneider, M.

- Publication Series "Applied Electrochemistry in Material Science", Michaelis, A. (Hrsg.); Schneider, M. (Hrsg.), Stuttgart: Fraunhofer Verlag, Start 2009
- DGO-Bezirksgruppe Sachsen der Deutschen Gesellschaft für Galvano- und Oberflächentechnik, Chairman
- GfKORR technical advisory board of the Society for Corrosion Protection, Working group "Korrosion keramischer Werkstoffe", Chairman

#### Dr.-Ing. Schubert, L.

- Guideline committee VDI-GPP FA628 "Strukturüberwachung und Beurteilung von Windenergieanlagen und Plattformen"

#### Prof. Stelter, M.

- Center for Energy and Environmental Chemistry CEEC, Jena, Member of directorate
- MNT Mikro-Nano-Technologie Thüringen e. V., Executive board
- Clusterboard, Free State of Thuringia
- RIS3 working group "Nachhaltige Energie und Ressourcenverwendung", Free State of Thuringia
- VDMA, Working group Research and innovation in medical technology

#### Dr. Jonas Sundqvist

- Cool Silicon e. V., Dresden, Division "ALD Lab Saxony", Division manager
- Critical Materials Council – CMC Fabs, USA, Sr. Technology Analyst CVD & ALD Materials & Conference, Co-chair
- HERALD EU Cost Action "Hooking together European research in Atomic Layer Deposition", Social media & news coordinator

#### Dr. Voigt, I.

- BVMW German Association for Small and Medium-sized Businesses
- DECHEMA Society for Chemical Engineering and Biotechnology
- DKG Deutsche Keramische Gesellschaft / German Ceramic Society, Member of executive board
- American Ceramic Society – ACerS
- DGM German Society for Materials Research
- University council of Ernst-Abbe-Hochschule Jena

#### Dr. Wunderlich, C.

- Fuel Cell Energy Solutions GmbH, Member of advisory board
- Energy Saxony e. V., Deputy chairman
- European Fuel Cell Forum,

- International board of advisors
- American Ceramic Society – ACerS

#### Prof. Zschech, E.

- Federation of the European Materials Societies – FEMS, Brussels, Member of executive board
- European Alliance for Materials – A4M, Brussels, Member of executive board
- The European Platform on Advanced Materials and Technologies – EUMAT, Brussels, Member of the steering board
- European Materials Characterization Council, Brussels, Member of advisory board
- CENIMAT/13N Lisbon, Member of advisory board
- Institute of Lightweight Construction and Hybrid Systems at University Paderborn, Member of scientific advisory board
- DRESDEN-concept e. V., "Information technologies and microelectronics", Scientific committee
- Cool Silicon e. V., Dresden, Member of executive board

#### Dr. Zins, M.

- Fraunhofer-Allianz AdvanCer, Sprecher
- Editorial Board of the Journal "Ceramic Applications", Göller Verlag, Chairman
- American Ceramic Society – ACerS

#### Technical committees

##### Dipl.-Krist. Adler, J.

- DGM technical committee "Zelluläre Werkstoffe"
- FAD Research Association for Diesel Emission Control Technologies

##### Dr. Berger, L.-M.

- DVS technical committee 2 "Thermisches Spritzen und Autogentechnik"
- DIN/DVS joint committee NA 092-00-14 AA "Thermisches Spritzen und thermisch gespritzte Schichten"

##### Dr. Böer, J.

- DKG technical committee TFA 6-1 "Charakterisierung Poröse Keramiken"

##### Dipl.-Math. Brand, M.

- DGZfP technical committee "Schallemissionsprüfung (SEP)"

##### Dr. Eberstein, M.

- DGG technical committee 1 "Physik und Chemie des Glases"
- DKG/DGG working group "Glasig-kristalline Multifunktionswerkstoffe"

##### Dr. FaBauer, B.

- Fraunhofer Water Systems Alliance (SysWasser)
- Wasserwirtschaftliches Energiezentrum Dresden – e.qua impuls e. V.
- Professional association "Biogas"
- agra – Zentrum für Innovation, Member of innovation advisory board

#### Freund, S.

- Fraunhofer AdvanCer Alliance, Central office

#### Dr. Fries, M.

- DKG joint committee "Hochleistungskeramik", working group "Verarbeitungseigenschaften synthetischer keramischer Rohstoffe", Group manager
- DKG technical committee FA 3 "Verfahrenstechnik"
- ProcessNet technical group "Agglomerations- und Schüttguttechnik", Member of advisory board
- ProcessNet technical group "Trocknungstechnik", Member of advisory board

#### Dr. Gestrich, T.

- Joint committee "Pulvermetallurgie", expert group "Sintern"
- GEFTA working group "Thermophysik"

#### Dipl.-Ing. Gronde, B.

- Community "Thermisches Spritzen e. V."

#### Dr. Hentschel, D.

- DGZfP technical committee "ZfP in der Luftfahrt", Deputy manager

#### Dr. Herrmann, M.

- DGM technical committee "Field Assisted Sintering Technique / Spark Plasma Sintering"
- GfKORR working group "Korrosion keramischer Werkstoffe"
- DKG technical committee 6 "Material- und Prozessdiagnostik"

#### Dr. Kaiser, A.

- GEFTA working group "Thermophysik"
- DGM technical committee "Thermodynamik, Kinetik und Konstitution der Werkstoffe"

#### Dr. Kinski, I.

- DGK working group 12 "Spektroskopie"
- DGK working group "AK13 Pulverdiffraktometrie"

#### Dr. Klemm, H.

- DKG joint committee "Hochleistungskeramik", working group "Verstärkung keramischer Stoffe"
- DIN committee for standardization "Materialprüfung NMP 291"
- DIN committee for standardization "Materialprüfung NMP 294"
- Carbon Composites e. V., working group "Ceramic Composites"

#### Kunath, R.

- Working group "Spezialbibliotheken"

#### Dr. Kusnezoff, M.

- DIN/VDE, Department K 141, DKE German Commission, "Elektrotechnik Elektronik Informationstechnik"
- DIN/VDE, Department K 384, DKE German Commission, "Brennstoffzellen"
- DGM working group "Aufbau-

## NAMES, DATES, EVENTS

- und Verbindungstechnik für Hochtemperatursensoren", AVT working group manager
- Dr. Lausch, H.**
- VDE/VDI Society of Microelectronics, Microsystems and Precision Engineering, GMM technical committee 4.7 "Mikro-Nano-Integration"
  - VDE/DGMT/BMBF accompanying research "Intelligente Implantate", External member
  - biosaxony – Verein für Biotechnologie & Life Sciences e. V.
  - InfectoGnostics research campus Jena/Funding initiative "Forschungscampus – öffentlich-private Partnerschaft für Innovationen" of the BMBF
  - German platform NanoBioMedizin
  - BIO CITY LEIPZIG, BIO-NET LEIPZIG Technologietransfergesellschaft
- Dipl.-Ing. Ludwig, H.**
- DGM technical committee "Biomaterialien"
- Dr. Martin, H.-P.**
- DTG German Thermoelectric Society
  - DVS committee for technology, working group W3 "Fügen von Metall, Keramik und Glas"
- Dipl.-Ing. Metasch, R.**
- ZVEI working group "Hochtemperaturlektronik"
- Prof. Meyendorf, N.**
- DGZfP technical committee "Materialcharakterisierung"
  - DGZfP technical committee "Zustandsüberwachung"
  - DGZfP technical committee "ZfP in der Luftfahrt"
  - DGZfP technical committee "Hochschullehrer ZfP"
  - VDI-GME division 1 "Werkstofftechnik" FA101 "Anwendungsnahe zerstörungsfreie Werkstoff- und Bauteilprüfung"
  - DGZfP working group Berlin
  - ASNT Miami Valley Section
- Dr. Moritz, T.**
- DECHEMA technical committee "Nanotechnologie"
  - DKG expert group "Keramik-spritzguss" CIM, Chairman of the executive board
  - DKG technical committee III "Verfahrenstechnik"
  - DKG "Szene Additiv"
  - EPMA-Additive Manufacturing Group
  - Editorial board of the cfi/Ber.DKG, Chairman
  - Management Committee of COST action MP1105 "Flame-retardant Materials"
- Dipl.-Phys. Mürbe, J.**
- VDI regional association Dresden, working group "Granulometrie"
- Dr. Petasch, U.**
- FAD Research Association for Diesel Emission Control Technologies
- Dr. Potthoff, A.**
- DGM/DKG working group "Prozessbegleitende Prüfverfahren"
  - DECHEMA/VCI working group "Responsible Production and Use of Nanomaterials"
  - DIN committee for standardization NMP NA 062-08-16 AA "Chemische Oberflächenanalyse und Rastersondenmikroskopie"
  - DIN committee for standardization NMP NA 062-08-17-03 UA "Gesundheits- und Umweltaspekte"
  - Fraunhofer Nanotechnology Alliance
  - VDI regional association Dresden, working group "Granulometrie"
- Dr. Pötschke, J.**
- VDI technical committee "Schneidstoffanwendung"
  - EPMA working group "European Hard Materials Group"
  - DGM/DKG joint committee "Pulvermetallurgie"
- Dipl.-Ing. Räthel, J.**
- DGM technical committee "Field Assisted Sintering Technique / Spark Plasma Sintering (FAST/SPS)"
- Dr. Rebenklau, L.**
- VDE/VDI Society of Microelectronics, Microsystems and Precision Engineering, GMM Technical committee 5.5 "Aufbau- und Verbindungstechnik"
  - Working group "Aufbau- und Verbindungstechnik für Hochtemperatursensoren"
  - DVS working group A 2.4 "Bonden im DVS"
- Dr. Reichel, U.**
- DGM technical committee "Field Assisted Sintering Technique / Spark Plasma Sintering (FAST/SPS)"
- Dr. Richter, H.-J.**
- DGM/DKG expert group "Additive Manufacturing" in the joint committee "Pulvermetallurgie"
  - DGM technical committee "Additive Fertigung"
  - Fraunhofer Additive Manufacturing Alliance
- Dr. Rost, A.**
- DKG/DGG working group "Glasig-kristalline Multifunktionswerkstoffe"
  - DVS committee for technology, working group W3 "Fügen von Metall, Keramik und Glas"
- Dr. Sauchuk, V.**
- DGM technical committee "Werkstoffe der Energietechnik"
- Dr. Schilm, J.**
- DGG technical committee 1 "Physik und Chemie des Glases"
  - DKG/DGG working group "Glasig-kristalline Multifunktionswerkstoffe"
  - DVS committee for technology, working group W3 "Fügen von Metall, Keramik und Glas"
- Dr. Schneider, M.**
- GfKORR working group "Korrosion keramischer Werkstoffe", Chairman
- Dr. Schubert, F.**
- DGZfP technical committee "Ultraschall", subcommittee "Modellierung und Bildgebung"
  - DGZfP technical committee "Ultraschall", subcommittee "Phased Array", Deputy manager
  - DGZfP working group Dresden, Group manager
- Dr.-Ing. Schubert, L.**
- DGZfP technical committee "Zustandsüberwachung", Manager
  - Technical committee "Berufs- und Ausbildungsfragen, Unterausschuss Ausbildung BC"
- Dipl.-Chem. Schubert, R.**
- DKG expert group "Keramik-spritzguss" CIM
- Dipl.-Ing. Stahn, M.**
- VDI working group "Entwicklung, Konstruktion, Vertrieb"
- Standke, G.**
- DGM technical committee "Zelluläre Werkstoffe"
- Prof. Stelter, M.**
- DGM technical committee "Werkstoffe der Energietechnik"
  - medways e. V. (The industry association for Medical Technology and Biotechnology)
  - OptoNet e. V., (Photonics network Thuringia)
- Dipl.-Min. Thiele, S.**
- GTS community "Thermisches Spritzen e. V."
- Dr. Voigt, I.**
- DECHEMA/VDI-GVC ProcessNet technical group "Produktionsintegrierte Wasser- und Abwassertechnik"
  - DECHEMA/VDI-GVC ProcessNet technical group "Membrantechnik"
  - DKG/DGM joint committee "Hochleistungskeramik", Chairman
  - DKG/DGM joint committee "Hochleistungskeramik", working group "Keramische Membranen", Chairman
- Dr. Weidl, R.**
- European Society of Thin Films (EFDS)
  - BVES German Energy Storage Association, working group 2 "Roadmap der Energiewende und Rolle der Energiespeicher"
  - CEEC – Center for Energy and Environmental Chemistry
- Dr. Weyd, M.**
- DGMT German Society for Membrane Technology
- Dr. Wunderlich, C.**
- VDI-GEU VDI Society Energy and Environment, VDI/VDE technical committee "Brennstoffzellen"
- Prof. Zschech, E.**
- Cool Silicon technical committee "Materialintegration und Zuverlässigkeit", Manager
  - DGM working group "Röntgentomographie", Group manager
- Dr. Zins, M.**
- DKG coordination group "Strukturwerkstoffe Fachausschüsse"
  - DKG division 1 "Chemie-/Maschinen-/Anlagenbau", Chairman
  - DKG joint committee "Pulvermetallurgie"
  - Deutsche Messe AG, Advisory board "Industrial Supply"
  - Messe München, Advisory board "Ceramic"
  - Institut für Prozess- und Anwendungstechnik Keramik, RWTH Aachen, Member of executive board
- Committees for symposia**
- Dipl.-Krist. Adler, J.**
- 6th International Congress on Ceramics – From Lab to Fab – ICC6, Symposium "Cellular and porous ceramics", Dresden (21.–25.8.2016), Symposium organizer
  - 4th International Symposium on New Frontier of Advanced Si-based Ceramics and Composites – ISASC 2016, Busan, Korea (25.–28.9.2016), International advisory committee
  - 4th Cellular Materials – CellMat 2016, Dresden (7.–9.12.2016), Program committee
- Capraro, B.**
- DKG seminar "Foliengieß- und Schlitzdüsen-Verfahren sowie Aspekte der Folienweiterverarbeitung" at Fraunhofer IKTS, Hermsdorf (9.–10.11.2016), Organization
- Dr. Eberstein, M.**
- IMAPS/ACers/DKG 12th International Conference and Exhibition on Ceramic Interconnect and Ceramic Microsystems Technologies – CICMT 2016, Denver (19.–21.4.2016), Local organizing committee
- Freund, S.**
- AdvanCer-Schulungsprogramm "Einführung in die Hochleistungskeramik Teil I: Werkstoffe, Verfahren, Anwendungen", Dresden (16.–17.6.2016), Organization and moderation
- Dr. Gall, M.**
- IEEE International Reliability Physics Symposium – IRPS 2016, Pasadena, CA, USA, (17.–21.4.2016), Technical committee
  - IEEE International Interconnect Technology Conference / Advanced Metallization Conference – IITC/AMC San Jose, CA, USA

- (23.–26.5.2016), Technical committee
- 14th International Conference on Reliability and Stress-Related Phenomena in Nanoelectronics, Experiment and Simulation – IRSP, Bad Schandau, Germany (31.5.–2.6.2016), Technical committee
- Dr. Gestrich, T.**
- 35. Hagerer Symposium Pulvermetallurgie "Zerspanung von und mit pulvermetallurgischen Werkstoffen", Hagen (24.–25.11.2016)
- Dr. Herrmann, M.**
- 15th Conference & Exhibition of the European Ceramic Society – ECERS2017, Budapest, Hungary (9.–13.7.2017), Organizing committee
  - 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Symposium organizer
- Dr. Jahn, M.**
- 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Symposium organizing committee
- Dr. Kinski, I.**
- 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Symposium organizer
- Dr. Klemm, H.**
- 9th International Conference on High Temperature Ceramic Matrix Composites – HTC MC 9, Symposium "Advanced thermal and environmental barrier coatings: processing, properties and applications", Toronto, Canada (26.–30.6.2016), Symposium organizer
  - 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Conference committee, International advisory board and Symposium organizer
- Dr. Köhler, B.**
- 19th World Conference on Non-destructive Testing – WCNDT 2016, Munich (13.–17.6.2016), Scientific program committee "Nano-Technologies and High-Resolution NDT"
- Dr. Kusnezoff, M.**
- 40th International Conference and Exhibition on Advanced Ceramics and Composites – ICACC 2016, Daytona Beach (24.–29.1.2016), Session chair
  - 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Symposium organizer
- Dr. Martin, H.-P.**
- Industrietag "Charakterisierung mechanischer Eigenschaften bei hohen Temperaturen", Dresden (1.–2.6.2016), Organizer
  - 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Symposium organizing committee
- Prof. Meyendorf, N.**
- SPIE Conference "Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems", Las Vegas, Nevada (21.–24.3.2016), Chair
- Prof. Michaelis, A.**
- 40th International Conference and Exhibition on Advanced Ceramics and Composites – ICACC 2016, Daytona Beach (24.–29.1.2016), 40th Jubilee Symposium: Engineered Ceramics – Current Status and Future Prospects
  - 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Conference committee, Chair
  - Symposium Ceramics Vision 2017, IKTs Hermsdorf (17.–18.1.2017)
- Dr. Moritz, T.**
- 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Conference committee, Session organizer
- Dr. Neubert, H.**
- 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Symposium organizing committee
- Dr. Opitz, J.**
- GRL-FYK Opening Ceremony & Workshop, Session II, Seoul (26.4.2016), Session Chair
  - 19th World Conference on Non-Destructive Testing – WCNDT, Munich (13.–17.6.2016), Scientific program committee
  - 6th International Congress on Ceramics – ICC6, Session "Materials and process diagnosis for quality assessment/non-destructive testing", Dresden (21.–25.8.2016), Session organizer, Session chair
- Dr. Partsch, U.**
- 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Symposium organizer
- Dr. Röllig, M.**
- 18th International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems – EuroSimE, Dresden (2.–5.4.2017), IEEE, Chair
  - 17th International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems – EuroSimE, Montpellier (17.–20.4.2016), IEEE, Technical program committee
- Dr. Schneider, M.**
- 9th International Workshop on Impedance Spectroscopy – IWIS 2016, Chemnitz (26.–28.9.2016), Program committee
  - 12th International Symposium on Electrochemical Machining Technology – INSECT 2016, Mechelen (17.–18.11.2016), Advisory board
  - Symposium "Anodisieren – Oxidschichten von hart bis smart", Dresden (24.–25.11.2016), Organization committee
- Dr. Schubert, F.**
- 19th World Conference on Non-Destructive Testing – WCNDT 2016, Munich (13.–17.6.2016), Scientific program committee "Structural Health Monitoring"
- Dr.-Ing. Schubert, L.**
- 2nd user seminar of the DGZfP technical committee "Zustandsüberwachung", expert panel "Geführte Ultraschallwellen", Petershagen/Eggersdorf (26.–27.10.2016)
- Dr. Sundqvist, Jonas**
- Critical Materials Council Conference – CMC 2016, Hillsboro (5.–6.5.2016), Co-chair
  - 16th International Conference on Atomic Layer Deposition – ALD 2016, Dublin (24.–27.7.2016) Co-chair
  - 3rd International Workshop on Atomic Layer Etching – ALE 2016, Dublin (24.–27.7.2016), Scientific committee
  - ALD Symposium SEMICON Europa, Grenoble (25.–27.10.2016), Co-chair
  - ALD For Industry, EFDS Workshop, Dresden (17.–18.1.2017), Co-chair
  - CMC Conference 2017 – Critical Materials for Semiconductor Device Manufacturing, Dallas (11.–12.5.2017), Co-chair
  - EuroCVD21 / Baltic ALD15 2017, Linköping (11.–14.6.2017), Organization committee
  - 17th International Conference on Atomic Layer Deposition – ALD 2017, Denver (15.–18.7.2017), Scientific committee
- Dr. Voigt, I.**
- 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Symposium organizer
- Dr. Weidl, R.**
- 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Symposium organizer
- Dr. Wolter, M.**
- 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Conference committee, International advisory board
- Dr. Wunderlich, C.**
- 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Conference committee, International advisory board
- Dr. Zins, M.**
- 91th DKG Annual Conference & Symposium on High-Performance Ceramics 2016, Freiburg (7.–9.3.2016), Program committee
  - 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Symposium organizer
  - Ceramitec 2016, Tag der Technischen Keramik, Munich (22.10.2016), Host
- Prof. Zschech, E.**
- 14th International Conference on Reliability and Stress-Related Phenomena in Nanoelectronics, Dresden (30.5.–1.6.2016), Chair
  - 4th Dresden Nanoanalysis Symposium, Dresden (15.6.2016), Chair
  - 6th International Congress on Ceramics – From Lab to Fab – ICC6, Dresden (21.–25.8.2016), Symposium organizing committee
  - 27th European Symposium on Reliability of Electron Devices, Failure Physics and Analysis – ESREF 2016, Halle, Saale (19.–22.9.2016), Scientific committee
  - 62nd IEEE International Electron Devices Meeting IEDM 2016, San Francisco, CA (3.–7.12.2016), Scientific committee

## Dissertations 2016

### Conze, Susan

Precursor-basierte Darstellung von Magnéli-Phasen  $Ti_nO_{2n-1}$  für die Anwendung als Thermoelektrikum  
Dissertation 2016  
Fraunhofer IKTS – TU Dresden, Fakultät Maschinenwesen, Institut für Werkstoffwissenschaft

### Feng, Bing

Herstellung, Modifizierung und Charakterisierung von borcarbid-basierten Keramiken als Thermoelektrikum  
Dissertation 2016  
Fraunhofer IKTS – TU Dresden, Fakultät Maschinenwesen

### Gommlich, Andreas

Entwicklung einer neuen Methode zur Ansteuerung von Ultraschall-Phased Arrays  
Dissertation 2016  
Fraunhofer IKTS – TU Dresden, Fakultät Elektrotechnik und Informationstechnik

### Heubner, Christian

Thermisch-elektrochemische inoperando Untersuchungen zur lokalen Wärmeerzeugung in Lithiumionenbatteriezellen

## NAMES, DATES, EVENTS

Dissertation 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät Maschinenwesen, Institut  
für Werkstoffwissenschaft

### Hohlfeld, Kai

Herstellung und Charakterisierung  
piezokeramischer Komponenten und  
daraus abgeleiteter Piezokomposite  
Dissertation 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät Maschinenwesen, Institut  
für Werkstoffwissenschaft

### Kunze, Steffen

Entwicklung von SiSiC-Strukturkeramiken aus Reaktionsharzbeton  
Dissertation 2016

Fraunhofer IKTS – TU Dresden,  
Institut für Leichtbau und Kunststofftechnik

### Majumder, Anindya

Functionalization and large scale  
assembly of carbon nanotubes  
Dissertation 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät Maschinenwesen, Institut  
für Werkstoffwissenschaft

### Oberländer, Andreas

Synthese und Charakterisierung  
von Galliumoxidnitriden  
Dissertation 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät Maschinenwesen, Institut  
für Werkstoffwissenschaft

### Pötschke, Johannes

Gefügeausbildung und Eigenschaften  
von nanoskaligen binderfreien  
Hartmetallen  
Dissertation 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät Maschinenwesen, Institut  
für Werkstoffwissenschaft

### Reichelt, Erik

Theoretische und experimentelle  
Untersuchungen zu Stofftransport  
und Druckverlust in geschütteten  
und strukturierten Festbetten  
Dissertation 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät Maschinenwesen, Institut  
für Verfahrenstechnik und Umwelt-  
technik

### Simon, Adrian

Schichten aus Kohlenstoff-Nano-  
materialien auf asymmetrisch porösen  
keramischen Trägern und deren  
Erprobung für Anwendungen in  
Membrantechnik und Katalyse  
Dissertation 2016

Fraunhofer IKTS – TU Ilmenau,  
Institut für Chemie und Biotechnik

### Svoboda, Hermann

Untersuchungen zu mikroskopi-  
schen und makroskopischen Grün-  
körperfehlern bei der uniaxialen  
Pressverdichtung  
Dissertation 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät Maschinenwesen, Institut  
für Werkstoffwissenschaft

## Theses 2016

### Bachmann, Sebastian

Herstellung und Entwicklung von  
porös-geträgerten Na- $\beta$ -Al<sub>2</sub>O<sub>3</sub> Fest-  
körperelektrolytschichten  
Master's thesis 2016

Fraunhofer IKTS – Ernst-Abbe-  
Hochschule Jena, Fachbereich SciTec

### Becher, Martin

Entwicklung eines automatischen  
Gaspermeationsmessplatzes zur  
Charakterisierung keramischer  
Membranen  
Master's thesis 2016

Fraunhofer IKTS – Ernst-Abbe-  
Hochschule Jena, Fachbereich  
Maschinenbau

### Blehschmidt, Paul

Automatisierte Datenerfassung und  
Protokollerstellung für die Charak-  
terisierung von Ultraschallprüfköpfen  
Diploma thesis 2016

Fraunhofer IKTS – HTW Dresden,  
Fakultät Elektrotechnik

### Beyer, Michael

Entwicklung und Herstellung breit-  
bandiger Ultraschallprüfköpfe  
Diploma thesis 2016

Fraunhofer IKTS – HTW Dresden,  
Fakultät Elektrotechnik

### Eckoldt, Moritz

Untersuchung des elektromechanischen  
Energiewandlungspotenzials  
zur autonomen Energieversorgung  
von Kleingeräten  
Diploma thesis 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät Elektrotechnik und Infor-  
mationstechnik, Institut für Fein-  
werktechnik und Elektronik-Design

### Eiselt, Matthias

FPGA Implementierung eines Such-  
verfahrens zur akustischen Muster-  
erkennung  
Diploma thesis 2016

Fraunhofer IKTS – HTW Dresden,  
Fakultät Elektrotechnik

### Grünberg, Ivo

Experimentelle Untersuchungen zur  
Synthese höherer Alkohole an eisen-  
basierten Katalysatorsystemen  
Master's thesis 2016  
Fraunhofer IKTS – TU Dresden,  
Fakultät Maschinenwesen, Institut  
für Verfahrenstechnik und Umwelt-  
technik

### Haufe, Eric

Bestimmung statischer magnetischer  
Eigenschaften von magnetischen  
Formgedächtnislegierungen  
Diploma thesis 2016  
Fraunhofer IKTS – TU Dresden,  
Fakultät Elektrotechnik und Infor-  
mationstechnik, Institut für Fein-  
werktechnik und Elektronik-Design

### Henker, Tobias

Untersuchung elektromechanischer  
Wandlerkonzepte für piezoelektrische  
Generatoren bei stochastischer

Anregung

Diploma thesis 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät Elektrotechnik und Infor-  
mationstechnik, Institut für Fein-  
werktechnik und Elektronik-Design

### Hönig, Ulrike

Erstellung eines Anforderungspro-  
fils an Referenzversuche zur Ermitt-  
lung und Bewertung von unter-  
schiedlichen Schadensmechanismen  
in Faserverbunden mittels Schall-  
emissionsanalyse  
Diploma thesis 2016

Fraunhofer IKTS – TU Bergakademie  
Freiberg, Fakultät Maschinenbau,  
Verfahrens- und Energietechnik

### Hoppe, Domenic

Schwachstellenanalyse von Elektro-  
nikkomponenten bei der Struktur-  
integration in GFK-Bauteile  
Diploma thesis 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät Maschinenwesen, Institut  
für Leichtbau und Kunststofftechnik

### Ji, Hyunjoon

Investigation of the influence of  
process parameters on the electro-  
lyte penetration process in lithium-  
ion battery production  
Master's thesis 2016

Fraunhofer IKTS – Hochschule  
Offenburg, Fakultät Maschinenbau  
und Verfahrenstechnik (M+V)

### Johne-Michaelis, Robert

Entwicklung thermoplastischer  
Massen für den Thermoplastischen  
3D-Druck (T3DP)  
Diploma thesis 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät Maschinenwesen, Institut  
für Werkstoffwissenschaft

### Kluge, Steven

Präparation und Charakterisierung  
von Membranen zur Aufkonzent-  
rierung von 80,3 Ma-% n-Butanol  
aus wässrigen Gemischen in Flach-  
membran- und Einkanalrohrgeometrie  
Bachelor's thesis 2016

Fraunhofer IKTS – Brandenburgische  
TU Cottbus – Senftenberg, Campus  
Senftenberg

### Knoch, Philip

Durchführung von Vibrationsversu-  
chen an Lotkontakten unter einer  
Temperaturwechselast  
Bachelor's thesis 2016

Fraunhofer IKTS – Berufsakademie  
Sachsen, Staatliche Studienakademie  
Riesa, Studienrichtung Umwelttechnik

### Liebmann, Tobias

Mikroelektrochemische Untersu-  
chungen an Aluminiumknetlegie-  
rungen  
Master's thesis 2016

Fraunhofer IKTS – HTW Dresden,  
Fakultät Landbau/Umwelt/Chemie,  
Studiengang Chemieingenieurwesen

### Liu, Yao

Entwicklung eines miniaturisierten  
Elektrolyseurs in keramischer Mehr-

lagentechnologie

Diploma thesis 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät für Elektrotechnik und In-  
formationstechnik, Institut für Auf-  
bau- und Verbindungstechnik der  
Elektronik

### Merkel, Susann

Untersuchungen zur Temperat-  
ur-entwicklung an technisch reinem  
Cobalt bei anodischen Reaktionen  
mit hohen Stromdichten  
Bachelor's thesis 2016

Fraunhofer IKTS – HTW Dresden,  
Fakultät Landbau/Umwelt/Chemie,  
Bereich Chemieingenieurwesen

### Nickol, Alexander

Korrosionsverhalten von Siliciumnit-  
ridwerkstoffen in wässrigen Medien  
Diploma thesis 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät Maschinenwesen, Institut  
für Verfahrenstechnik und Umwelt-  
verfahrenstechnik

### Parulewski, Franz

Methodenentwicklung zur Bestim-  
mung der Langzeitstabilität von Re-  
formierungskatalysatoren zum Ein-  
satz in SOFC-Systemen  
Diploma thesis 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät Maschinenwesen, Institut  
für Verfahrenstechnik und Umwelt-  
technik

### Rimbach, Isabel

Untersuchungen zur Präparation  
defektarmer BAM-Leuchtstoffpulver  
mit Partikelgrößen im sub- $\mu$ m Be-  
reich  
Master's thesis 2016

Fraunhofer IKTS – Ernst-Abbe-  
Hochschule Jena, Fachbereich SciTec,  
Studiengang Werkstofftechnik

### Rosenberg, Markus

Synthese und Charakterisierung  
von Perowskiten für die elektroka-  
talytische Sauerstoffreduktion  
Master's thesis 2016

Fraunhofer IKTS – Ernst-Abbe-  
Hochschule Jena, Fachbereich SciTec,  
Studiengang Werkstofftechnik

### Sammt, Nikhil Benjamin

Infrarotspektroskopische Untersu-  
chungen zur Wasseradsorption und  
-desorption an modifizierten Metall-  
oberflächen  
Bachelor's thesis 2016

Fraunhofer IKTS – Brandenburgische  
TU Cottbus-Senftenberg, Fakultät  
Umwelt und Naturwissenschaften

### Sattler, Julia-Christina

Elektrochemische Untersuchung  
der Leistungs- und Degradationsei-  
genschaften von Hochvoltspinell  
LiNi<sub>0,5</sub>Mn<sub>1,5</sub>O<sub>4</sub> mit unterschiedlicher  
spezifischer Oberfläche  
Bachelor's thesis 2016

Fraunhofer IKTS – TU Braunschweig,  
Institut für Partikeltechnik

### Schrötke, Elena

Elektrochemische Untersuchungen

zur anodischen Auflösung einer SiC-basierten Keramik  
Master's thesis 2016  
Fraunhofer IKTS – HTW Dresden,  
Fakultät Landbau/Umwelt/Chemie,  
Bereich Chemieingenieurwesen

**Seeba, Jann**  
Synthese und Charakterisierung  
von Mischmetalloxiden  
Master's thesis 2016  
Fraunhofer IKTS – FSU Jena, Che-  
misch-Geowissenschaftliche Fakultät

**Seiler, Tim**  
Entwicklung und Test von Ultraschall-  
Phased-Array-Prüfköpfen auf Basis  
von PMN-PT-Einkristall-Kompositen  
Bachelor's thesis 2016  
Fraunhofer IKTS – HTW Dresden,  
Fakultät Elektrotechnik

**Simunkova, Lenka**  
Untersuchung zum Einfluss der  
Elektrolytzusammensetzung auf die  
Oberflächenqualität beim ECM von  
Wolframcarbid-Cobalt  
Bachelor's thesis 2016  
Fraunhofer IKTS – HTW Dresden,  
Fakultät Landbau/Umwelt/Chemie,  
Bereich Chemieingenieurwesen

**Staden, Kevin von**  
Screening eines alternativen Ver-  
fahrens zur Herstellung von Palladi-  
um-Membranen: nasschemisches  
Abscheiden von Metallsalzen und  
Metallkomplexen auf nanoporösen  
Trägern mit anschließender Wär-  
mebehandlung  
Master's thesis 2016  
Fraunhofer IKTS – Ernst-Abbe-  
Hochschule Jena, Fachbereich SciTec

**Susca, Alessandro**  
Characterization of novel electrode  
materials for bipolar lithium-ion  
batteries  
Master's thesis 2016  
Fraunhofer IKTS – HTW Dresden,  
Fakultät Maschinenwesen, Institut  
für Werkstoffwissenschaft

**Tannert, Matthias**  
Development and characterisation  
of a porous support system for  
Na-β''-Al<sub>2</sub>O<sub>3</sub> thin layer electrolytes  
in high temperature batteries  
Master's thesis 2016  
Fraunhofer IKTS – Ernst-Abbe-  
Hochschule Jena, Fachbereich SciTec

**Voigt, Karsten**  
Kinetische Untersuchungen zur  
plasmaelektrolytischen Oxidation  
von Aluminium  
Master's thesis 2016  
Fraunhofer IKTS – TU Dresden,  
Fakultät Mathematik und Naturwis-  
senschaften, Fachrichtung Chemie  
und Lebensmittelchemie

**Werner, Daniel**  
Untersuchungen zur Herstellung  
orange/rot lumineszierender Kera-  
miken auf Basis moderner nitridi-  
scher Luminophore bei Anregung  
mit einer blauen LED  
Diploma thesis 2016

Fraunhofer IKTS – TU Dresden,  
Fakultät Maschinenwesen, Institut  
für Werkstoffwissenschaft

**Zobel, Ruben**  
Labortechnische Untersuchungen  
zum anaeroben Abbau von Rest-  
stoffen aus der Bioethanolproduktion  
der milchverarbeitenden Industrie  
Master's thesis 2016  
Fraunhofer IKTS – TU Dresden,  
Fakultät Umweltwissenschaften,  
Institut für Abfall- und Kreislauf-  
wirtschaft

**Zywietz, Immanuel**  
Untersuchungen zur elektrochemi-  
schen Thermodynamik von Aktiv-  
materialien für Lithiumionenbatterien  
Bachelor's thesis 2016  
Fraunhofer IKTS – BTU Cottbus-  
Senftenberg, Fakultät Umwelt und  
Naturwissenschaften