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22-Nov-17

- Almagro, I., Drzymała, P., Rodríguez-Navarro, A. B., Sainz-Díaz, C. I., Willinger, M. G., Bonarski, J., & Checa, A. (2016). Crystallography and textural aspects of crossed lamellar layers in Arcidae (Bivalvia, Mollusca) shells. *Key Engineering Materials*, 672, 60-70. doi:10.4028/www.scientific.net/KEM.672.60.
- Almagro, I., Drzymała, P., Berent, K., Sainz-Díaz, C. I., Willinger, M. G., Bonarski, J., & Checa, A. G. (2016). New Crystallographic Relationships in Biogenic Aragonite: The Crossed-Lamellar Microstructures of Mollusks. *Crystal Growth & Design*, 16(4), 2083-2093. doi:10.1021/acs.cgd.5b01775.
- Arrigo, R., Schuster, M. E., Abate, S., Giorgianni, G., Centi, G., Perathoner, S., Wrabetz, S., Pfeifer, V., Antonietti, M., & Schlögl, R. (2016). Pd supported on Carbon Nitride Boosts the Direct Hydrogen Peroxide Synthesis. *ACS Catalysis*, 6(10), 6959-6966. doi:10.1021/acscatal.6b01889.
- Baghizadeh, A., Vieira, J. M., Gonçalves, J. N., Willinger, M. G., Ferro, M. C., & Amaral, V. S. (2016). Nanodomains Coupled to Ferroelectric Domains Induced by Lattice Distortion in Self-Doped  $\text{LuMn}_x\text{O}_{3\pm\delta}$  Hexagonal Ceramics. *The Journal of Physical Chemistry C*, 120(38), 21897-21904. doi:10.1021/acs.jpcc.6b04478.
- Bare, S. R., Knop-Gericke, A., Teschner, D., Hävecker, M., Blume, R., Rocha, T., Schlögl, R., Chan, A. S., Blackwell, N., Charochak, M., Veen, R. t., & Brongersma, H. (2016). Surface Analysis of Zeolites: An XPS, Variable Kinetic Energy XPS, and Low Energy Ion Scattering Study. *Surface Science*, 648, 376-382. doi:10.1016/j.susc.2015.10.048.
- Bayer, B. C., Bosworth, D. A., Michaelis, F. B., Blume, R., Habler, G., Abart, R., Weatherup, R. S., Kidambi, P. R., Baumberg, J. J., Knop-Gericke, A., Schlögl, R., Baetz, C., Barber, Z. H., Meyer, J. C., & Hofmann, S. (2016). In Situ Observations of Phase Transitions in Metastable Nickel (Carbide)/Carbon Nanocomposites. *The Journal of Physical Chemistry C*, 120(39), 22571-22584. doi:10.1021/acs.jpcc.6b01555.
- Beermann, V., Gocyla, M., Willinger, E., Rudi, S., Heggen, M., Dunin-Borkowski, R. E., Willinger, M. G., & Strasser, P. (2016). Rh-Doped Pt–Ni Octahedral Nanoparticles: Understanding the Correlation between Elemental Distribution, Oxygen Reduction Reaction, and Shape Stability. *Nano Letters*, 16(3), 1719-1725. doi:10.1021/acs.nanolett.5b04636.
- Büchner, C., Wang, Z.-J., Burson, K., Willinger, M. G., Heyde, M., Schlögl, R., & Freund, H.-J. (2016). A Large-Area Transferable Wide Band Gap 2D Silicon Dioxide Layer. *ACS Nano*, 10(8), 7982-7989. doi:10.1021/acsnano.6b03929.
- Buller, S., Heise-Podleska, M., Pfänder, N., Willinger, M. G., & Schlögl, R. (2016). Carbon nanotubes as conducting support for potential Mn-oxide electrocatalysts: Influences of pre-treatment procedures. *Journal of Energy Chemistry*, 25(2), 265-271. doi:10.1016/j.jechem.2016.01.022.

Caneva, S., Weatherup, R. S., Bayer, B. C., Blume, R., Cabrero-Vilatela, A., Braeuninger-Weimer, P., Martin, M.-B., Wang, R., Baecht, C., Schlögl, R., Meyer, J. C., & Hofmann, S. (2016). Controlling Catalyst Bulk Reservoir Effects for Monolayer Hexagonal Boron Nitride CVD. *Nano Letters*, *16*(2), 1250-1261. doi:10.1021/acs.nanolett.5b04586.

Capdevila-Cortada, M., Vilé, G., Teschner, D., Pérez-Ramírez, J., & López, N. (2016). Reactivity descriptors for ceria in catalysis. *Applied Catalysis B*, *197*, 299-312. doi:10.1016/j.apcatb.2016.02.035.

Delmonde, M. V. F., Sallum, L. F., Perini, N., Gonzalez, E. R., Schlögl, R., & Varela, H. (2016). Electrocatalytic Efficiency of the Oxidation of Small Organic Molecules under Oscillatory Regime. *The Journal of Physical Chemistry C*, *120*(39), 22365-22374. doi:10.1021/acs.jpcc.6b06692.

Du, X.-L., Jiang, Z., Su, D. S., & Wang, J.-Q. (2016). Research Progress on the Indirect Hydrogenation of Carbon Dioxide to Methanol. *ChemSusChem*, *9*(4), 322-332. doi:10.1002/cssc.201501013.

Fechler, N., Zussblatt, N. P., Rothe, R., Schlögl, R., Willinger, M. G., Chmelka, B. F., & Antonietti, M. (2016). Eutectic Syntheses of Graphitic Carbon with High Pyrazinic Nitrogen Content. *Advanced Materials*, *28*(6), 1287-1294. doi:10.1002/adma.201501503.

Frank, B., Xie, Z., Friedel Ortega, K., Scherzer, M., Schlögl, R., & Trunschke, A. (2016). Modification of the carbide microstructure by N- and S-functionalization of the support in MoxC/CNT catalysts. *Catalysis Science & Technology*, *6*(10), 3468-3475. doi:10.1039/C5CY01480H.

Friedel Ortega, K., Arrigo, R., Frank, B., Schlögl, R., & Trunschke, A. (2016). Acid-Base Properties of N-Doped Carbon Nanotubes: A Combined Temperature-Programmed Desorption, X-ray Photoelectron Spectroscopy, and 2-Propanol Reaction Investigation. *Chemistry of Materials*, *28*(19), 6826-6839. doi:10.1021/acs.chemmater.6b01594.

Galván, C. Á., Schumann, J., Behrens, M., Fierro, J. L. G., Schlögl, R., & Frei, E. (2016). Reverse water-gas shift reaction at the Cu/ZnO interface: Influence of the Cu/Zn ratio on structure-activity correlations. *Applied Catalysis B*, *195*, 104-111. doi:10.1016/j.apcatb.2016.05.007.

Gatla, S., Aubert, D., Agostini, G., Mathon, O., Pascarelli, S., Lunkenbein, T., Willinger, M. G., & Kaper, H. (2016). Room-Temperature CO Oxidation Catalyst: Low-Temperature Metal-Support Interaction between Platinum Nanoparticles and Nanosized Ceria. *ACS Catalysis*, *6*(9), 6151-6155. doi:10.1021/acscatal.6b00677.

Heggen, M., Penner, S., Friedrich, M., Dunin-Borkowski, R. E., & Armbrüster, M. (2016). Formation of ZnO Patches on ZnPd/ZnO during Methanol Steam Reforming: A Strong Metal-Support Interaction Effect? *The Journal of Physical Chemistry C*, *120*(19), 10460-10465. doi:10.1021/acs.jpcc.6b02562.

Huang, X., Jones, T., Fan, H., & Willinger, M. G. (2016). Atomic-Scale Observation of Irradiation-Induced Surface Oxidation by In Situ Transmission Electron Microscopy. *Advanced Materials Interfaces*, *3*(22): 1600751. doi:10.1002/admi.201600751.

Huang, X., Yongqiang, Y., Jones, T., Fan, H., Wang, L., Xia, J., Wang, Z.-J., Shao, L., Meng, X., & Willinger, M. G. (2016). In Situ Formation of Crystallographically Oriented Semiconductor Nanowire Arrays via Selective Vaporization for Optoelectronic Applications. *Advanced Materials*, 28(35), 7603-7612. doi:10.1002/adma.201602867.

Johnson, B., Chinmoy, R., Greiner, M., Arrigo, R., Schuster, M. E., Höpfner, B., Gorgoi, M., Lauer mann, I., Willinger, M. G., Knop-Gericke, A., & Schlögl, R. (2016). Characterization of Platinum and Iridium Oxyhydrate Surface Layers from Platinum and Iridium Foils. *ChemSusChem*, 9(13), 1634-1646. doi:10.1002/cssc.201600143.

Jones, T., Wyrwich, R., Böcklein, S., Rocha, T. C. R., Carbonio, E., Knop-Gericke, A., Schlögl, R., Günther, S., Wintterlin, J., & Piccinin, S. (2016). Oxidation of Ethylene on Oxygen Reconstructed Silver Surfaces. *The Journal of Physical Chemistry C*, 120(50), 28630-28638. doi:10.1021/acs.jpcc.6b10074.

Kaichev, V. V., Teschner, D., Saraev, A. A., Kosolobov, S. S., Gladky, A. Y., Prosvirin, I. P., Rudina, N. A., Ayupov, A. B., Blume, R., Hävecker, M., Knop-Gericke, A., Schlögl, R., Latyshev, A. V., & Bukhtiyarov, V. I. (2016). Evolution of self-sustained kinetic oscillations in the catalytic oxidation of propane over a nickel foil. *Journal of Catalysis*, 324, 23-33. doi:10.1016/j.jcat.2015.11.009.

Kaichev, V. V., Chesalov, Y. A., Saraev, A. A., Klyushin, A., Knop-Gericke, A., Andrushkevich, T. V., & Bukhtiyarov, V. I. (2016). Redox mechanism for selective oxidation of ethanol over monolayer V<sub>2</sub>O<sub>5</sub>/TiO<sub>2</sub> catalysts. *Journal of Catalysis*, 338, 82-93. doi:10.1016/j.jcat.2016.02.022.

Kandemir, T., Friedrich, M., Parker, S. F., Studt, F., Lennon, D., Schlögl, R., & Behrens, M. (2016). Different routes to methanol: inelastic neutron scattering spectroscopy of adsorbates on supported copper catalysts. *Physical Chemistry Chemical Physics*, 18(26), 17253-17258. doi:10.1039/c6cp00967k.

Kast, P., Friedrich, M., Girgsdies, F., Kröhnert, J., Teschner, D., Lunkenbein, T., Behrens, M., & Schlögl, R. (2016). Strong metal-support interaction and alloying in Pd/ZnO catalysts for CO oxidation. *Catalysis Today*, 260, 21-31. doi:10.1016/j.cattod.2015.05.021.

Klues, M., Jerabek, P., Breuer, T., Oehzelt, M., Hermann, K., Berger, R., & Witte, G. (2016). Understanding the F 1s NEXAFS Dichroism in Fluorinated Organic Semiconductors. *The Journal of Physical Chemistry C*, 120(23), 12693-12705. doi:10.1021/acs.jpcc.6b04048.

Klyushin, A., Arrigo, R., Yi, Y., Xie, Z., Hävecker, M., Bukhtiyarov, A. V., Prosvirin, I. P., Bukhtiyarov, V. I., Knop-Gericke, A., & Schlögl, R. (2016). Are Au Nanoparticles on Oxygen-Free Supports Catalytically Active? *Topics in Catalysis*, 59(5-7), 469-477. doi:10.1007/s11244-015-0528-0.

Klyushin, A., Greiner, M., Huang, X., Lunkenbein, T., Li, X., Timpe, O., Friedrich, M., Hävecker, M., Knop-Gericke, A., & Schlögl, R. (2016). Is Nanostructuring Sufficient To Get Catalytically Active Au? *ACS Catalysis*, 6(5), 3372-3380. doi:10.1021/acscatal.5b02631.

Kozmenkova, A. Y., Kataev, E. Y., Belova, A. I., Amati, M., Gregoratti, L., Velasco Vélez, J., Knop-Gericke, A., Senkovsky, B., Vyalikh, D. V., Itkis, D. M., Shao-Horn, Y., & Yashina, L. V. (2016). Tuning surface chemistry of TiC electrodes for lithium-air batteries. *Chemistry of Materials*, 26(22), 8248-8255. doi:10.1021/acs.chemmater.6b03195.

Lee, J., Eiswirth, M., & Schlögl, R. (2016). Preface: Surface analysis and dynamics. *Catalysis Today*, 260, 1-2. doi:10.1016/j.cattod.2015.10.008.

Lee, J., & Schlögl, R. (Eds.). (2016). Surface Analysis and Dynamics (SAND) [Special Issue]. *Catalysis Today*, 260.

Li, X., Lunkenbein, T., Kröhnert, J., Pfeifer, V., Girgsdies, F., Rosowski, F., Schlögl, R., & Trunschke, A. (2016). Hydrothermal synthesis of bi-functional nanostructured manganese tungstate catalysts for selective oxidation. *Faraday Discussions*, 188, 99-113. doi:10.1039/C5FD00191A.

Li, X., Lunkenbein, T., Pfeifer, V., Jastak, M., Nielsen, P. K., Girgsdies, F., Knop-Gericke, A., Rosowski, F., Schlögl, R., & Trunschke, A. (2016). Selective Alkane Oxidation by Manganese Oxide: Site Isolation of MnO<sub>x</sub> Chains at the Surface of MnWO<sub>4</sub> Nanorods. *Angewandte Chemie International Edition*, 55(12), 4092-4096. doi:10.1002/anie.201510201.

Li, X., Lunkenbein, T., Pfeifer, V., Jastak, M., Nielsen, P. K., Girgsdies, F., Knop-Gericke, A., Rosowski, F., Schlögl, R., & Trunschke, A. (2016). Selektive Alkanoxidation an Manganoxid: isolierte, kettenförmige MnO<sub>x</sub>-Zentren an der Oberfläche von MnWO<sub>4</sub>-Nanostäbchen. *Angewandte Chemie*, 128(12), 4161-4165. doi:10.1002/ange.201510201.

Liu, X., Fechler, N., Antonietti, M., Willinger, M. G., & Schlögl, R. (2016). Synthesis of novel 2-d carbon materials: sp<sup>2</sup> carbon nanoribbon packing to form well-defined nanosheets. *Materials Horizons*, 3(3), 214-219. doi:10.1039/C5MH00274E.

Lukashuk, L., Föttinger, K., Kolar, E., Rameshan, C., Teschner, D., Hävecker, M., Knop-Gericke, A., Yigit, N., Li, H., McDermott, E., Stöger-Pollach, M., & Rupprechter, G. (2016). Operando XAS and NAP-XPS studies of preferential CO oxidation on Co<sub>3</sub>O<sub>4</sub> and CeO<sub>2</sub>-Co<sub>3</sub>O<sub>4</sub> catalysts. *Journal of Catalysis*, 344, 1-15. doi:10.1016/j.jcat.2016.09.002.

Lunkenbein, T., Girgsdies, F., Kandemir, T., Thomas, N., Behrens, M., Schlögl, R., & Frei, E. (2016). Bridging the Time Gap: A Copper/Zinc Oxide/Aluminum Oxide Catalyst for Methanol Synthesis Studied under Industrially Relevant Conditions and Time Scales. *Angewandte Chemie International Edition*, 55(41), 12708-12712. doi:10.1002/anie.201603368.

Lunkenbein, T., Girgsdies, F., Kandemir, T., Thomas, N., Behrens, M., Schlögl, R., & Frei, E. (2016). Bridging the Time Gap: A Copper/Zinc Oxide/Aluminum Oxide Catalyst for Methanol Synthesis Studied under Industrially Relevant Conditions and Time Scales. *Angewandte Chemie*, 128(41), 12900-12904. doi:10.1002/ange.201603368.

Luo, Y., Alarcón Villaseca, S., Friedrich, M., Teschner, D., Knop-Gericke, A., & Armbrüster, M. (2016). Addressing electronic effects in the semi-hydrogenation of ethyne by InPd<sub>2</sub> and intermetallic Ga-Pd compounds. *Journal of Catalysis*, 338, 265-272. doi:10.1016/j.jcat.2016.03.025.

- Macías-Sánchez, E., Checa, A. G., & Willinger, M. G. (2016). The Transport System of Nacre Components through the Surface Membrane of Gastropods. *Key Engineering Materials*, 672, 103-112. doi:10.4028/www.scientific.net/KEM.672.103.
- Maganas, D., Trunschke, A., Schlögl, R., & Neese, F. (2016). A unified view on heterogeneous and homogeneous catalysts through a combination of spectroscopy and quantum chemistry. *Faraday Discussion*, 188, 181-197. doi:10.1039/C5FD00193E.
- Marichy, C., Ercolano, G., Caputo, G., Willinger, M. G., Jones, D., Roziere, J., Pinna, N., & Cavaliere, S. (2016). ALD SnO<sub>2</sub> protective decoration enhances the durability of a Pt based electrocatalyst. *Journal of Materials Chemistry A*, 4(3), 969-975. doi:10.1039/C5TA08432F.
- Mayr, L., Shi, X.-R., Köpfle, N., Milligan, C. A., Zemlyanov, D. Y., Knop-Gericke, A., Hävecker, M., Klötzer, B., & Penner, S. (2016). Chemical vapor deposition-prepared sub-nanometer Zr clusters on Pd surfaces: promotion of methane dry reforming. *Physical Chemistry Chemical Physics*, 18(46), 31586-31599. doi:10.1039/C6CP07197J.
- Mette, K., Köhl, S., Tarasov, A., Willinger, M. G., Kröhnert, J., Wrabetz, S., Trunschke, A., Scherzer, M., Girsdies, F., Düdder, H., Kähler, K., Friedel Ortega, K., Muhler, M., Schlögl, R., Behrens, M., & Lunkenbein, T. (2016). High-Temperature Stable Ni Nanoparticles for the Dry Reforming of Methane. *ACS Catalysis*, 6(10), 7238-7248. doi:10.1021/acscatal.6b01683.
- Moser, M., Paunović, V., Guo, Z., Szentmiklósi, L., Hevia, M. G., Higham, M., López, N., Teschner, D., & Pérez-Ramírez, J. (2016). Interplay between surface chemistry and performance of rutile-type catalysts for halogen production. *Chemical Science*, 7(5), 2996-3005. doi:10.1039/C5SC04247J.
- Nacci, C., Saywell, A., Troadec, C., Deng, J., Willinger, M. G., Joachim, C., & Grill, L. (2016). Publisher's Note: "Toward printing molecular nanostructures from microstructured samples in ultrahigh vacuum" [J. Vac. Sci. Technol. B 34, 011801 (2016)]. *Journal of Vacuum Science and Technology B*, 34(5): 053401. doi:10.1116/1.4962725.
- Nacci, C., Troadec, C., Deng, J., Willinger, M. G., Joachim, C., & Grill, L. (2016). Toward printing molecular nanostructures from microstructured samples in ultrahigh vacuum. *Journal of Vacuum Science and Technology B*, 34(1): 011801. doi:10.1116/1.4936886.
- Namjesnik, D., Mutka, S., Iveković, D., Gajović, A., Willinger, M. G., & Preočanin, T. (2016). Application of the surface potential data to elucidate interfacial equilibrium at ceria/aqueous electrolyte interface. *Adsorption*, 22(4), 825-837. doi:10.1007/s10450-016-9785-x.
- Nenning, A., Opitz, A. K., Rameshan, C., Rameshan, R., Blume, R., Hävecker, M., Knop-Gericke, A., Rupprechter, G., Klötzer, B., & Fleig, J. (2016). Ambient Pressure XPS Study of Mixed Conducting Perovskite-type SOFC Cathode and Anode Materials under Well-Defined Electrochemical Polarization. *The Journal of Physical Chemistry C*, 120(3), 1461-1471. doi:10.1021/acs.jpcc.5b08596.
- Neumann, M., Teschner, D., Knop-Gericke, A., Reschetilowski, W., & Armbrüster, M. (2016). Controlled Synthesis and Catalytic Properties of Supported In-Pd Intermetallic Compounds. *Journal of Catalysis*, 340, 49-59. doi:10.1016/j.jcat.2016.05.006.

Oh, H.-S., Nong, H. N., Reier, T., Bergmann, A., Gliech, M., de Araújo, J. F., Willinger, E., Schlögl, R., Teschner, D., & Strasser, P. (2016). Electrochemical Catalyst–Support Effects and Their Stabilizing Role for IrO<sub>x</sub> Nanoparticle Catalysts during the Oxygen Evolution Reaction. *Journal of the American Chemical Society*, *138*(38), 12552-12563. doi:10.1021/jacs.6b07199.

Parapat, R. Y., Wijaya, M., Schwarze, M., Selve, S., Willinger, M. G., & Schomäcker, R. (2016). Correction: Particle shape optimization by changing from an isotropic to an anisotropic nanostructure: Preparation of highly active and stable supported Pt catalysts in microemulsions. *Nanoscale*, *8*(13), 7352-7352. doi:10.1039/C6NR90032A.

Pavlopoulos, N. G., Dubose, J. T., Pinna, N., Willinger, M. G., Char, K., & Pyun, J. (2016). Synthesis and Assembly of Dipolar Heterostructured Tetrapods: Colloidal Polymers with “Giant tert-butyl” Groups. *Angewandte Chemie International Edition*, *55*(5), 1787-1791. doi:10.1002/anie.201510458.

Pavlopoulos, N. G., Dubose, J. T., Pinna, N., Willinger, M. G., Char, K., & Pyun, J. (2016). Synthesis and Assembly of Dipolar Heterostructured Tetrapods: Colloidal Polymers with “Giant tert-butyl” Groups. *Angewandte Chemie*, *128*(5), 1819-1823. doi:10.1002/ange.201510458.

Perathoner, S., Centi, G., & Su, D. S. (2016). Turning Perspective in Photoelectrocatalytic Cells for Solar Fuels. *ChemSusChem*, *9*(4), 345-357. doi:10.1002/cssc.201501059.

Pfeifer, V., Jones, T., Wrabetz, S., Massué, C., Velasco Vélez, J., Arrigo, R., Scherzer, M., Piccinin, S., Hävecker, M., Knop-Gericke, A., & Schlögl, R. (2016). Reactive oxygen species in iridium-based OER catalysts. *Chemical Science*, *7*(11), 6791-6795. doi:10.1039/C6SC01860B.

Pfeifer, V., Jones, T., Velasco Vélez, J., Massué, C., Arrigo, R., Teschner, D., Girgsdies, F., Scherzer, M., Greiner, M., Allan, J., Hashagen, M., Weinberg, G., Piccinin, S., Hävecker, M., Knop-Gericke, A., & Schlögl, R. (2016). The electronic structure of iridium and its oxides. *Surface and Interface Analysis*, *48*(5), 261-273. doi:10.1002/sia.5895.

Pfeifer, V., Jones, T., Velasco Vélez, J., Massué, C., Greiner, M., Arrigo, R., Teschner, D., Girgsdies, F., Scherzer, M., Allan, J., Hashagen, M., Weinberg, G., Piccinin, S., Hävecker, M., Knop-Gericke, A., & Schlögl, R. (2016). The Electronic Structure of Iridium Oxide Electrodes Active in Water Splitting. *Physical Chemistry Chemical Physics*, *18*(4), 2292-2296. doi:10.1039/C5CP06997A.

Prieto, M., Carbonio, E., Landers, R., & de Siervo, A. (2016). Promotion Effect of Platinum on Gold's Reactivity: A High-Resolution Photoelectron Spectroscopy Study. *The Journal of Physical Chemistry C*, *120*(19), 10227-10236. doi:10.1021/acs.jpcc.5b08983.

Roiaz, M., Monachino, E., Dri, C., Greiner, M., Knop-Gericke, A., Schlögl, R., Comelli, G., & Vesselli, E. (2016). Reverse Water-Gas Shift or Sabatier Methanation on Ni(110)? Stable Surface Species at Near-Ambient Pressure. *Journal of the American Chemical Society*, *138*(12), 4146-4154. doi:10.1021/jacs.5b13366.

Schlögl, R. (2016). Selective Oxidation: From a Still Immature Technology to the Roots of Catalysis Science. *Topics in Catalysis*, *59*(17), 1461-1476. doi:10.1007/s11244-016-0684-x.

Schlögl, R. (2016). Sustainable Energy Systems: The Strategic Role of Chemical Energy Conversion. *Topics in Catalysis*, 59(8-9), 772-786. doi:10.1007/s11244-016-0551-9.

Schumann, J., Tarasov, A., Thomas, N., Schlögl, R., & Behrens, M. (2016). Cu,Zn-based catalysts for methanol synthesis: On the effect of calcination conditions and the part of residual carbonates. *Applied Catalysis A*, 516, 117-126. doi:10.1016/j.apcata.2016.01.037.

Schwach, P., Eichelbaum, M., Schlögl, R., Risse, T., & Dinse, K.-P. (2016). Evidence for Exchange Coupled Electrons and Holes in MgO after Oxidative Activation of CH<sub>4</sub>: A Multifrequency Transient Nutation EPR Study. *The Journal of Physical Chemistry C*, 120(7), 3781-3790. doi:10.1021/acs.jpcc.5b11057.

Schwarz, H., Dong, Y., & Horn, R. (2016). Catalytic Methane Combustion on a Pt Gauze: Laser-Induced Fluorescence Spectroscopy, Species Profiles, and Simulations. *Chemical Engineering and Technology*, 39(11), 2011-2019. doi:10.1002/ceat.201600286.

Stempel, V. E., Löffler, D., Kröhnert, J., Skorupska, K., Johnson, B., d'Alnoncourt, R. N., Driess, M., & Rosowski, F. (2016). Enhancing of catalytic properties of vanadia via surface doping with phosphorus using atomic layer deposition. *Journal of Vacuum Science and Technology A*, 34(1): 01A135. doi:10.1116/1.4936390.

Su, D. S., & Schlögl, R. (2016). Chemistry of Energy Conversion and Storage. *ChemSusChem*, 9(4), 316-317. doi:10.1002/cssc.201600153.

Turczyniak, S., Teschner, D., Machocki, A., & Zafeiratos, S. (2016). Effect of the surface state on the catalytic performance of a Co/CeO<sub>2</sub> ethanol steam-reforming catalyst. *Journal of Catalysis*, 340, 321-330. doi:10.1016/j.jcat.2016.05.017.

Velasco Vélez, J., Pfeifer, V., Hävecker, M., Wang, R., Centeno, A., Zurutuza, A., Algara-Siller, G., Stotz, E., Skorupska, K., Teschner, D., Kube, P., Braeuninger-Weimer, P., Hofmann, S., Schlögl, R., & Knop-Gericke, A. (2016). Atmospheric pressure X-ray photoelectron spectroscopy apparatus: Bridging the pressure gap. *Review of Scientific Instruments*, 87(5): 053121. doi:10.1063/1.4951724.

Velasco Vélez, J., Davaasuren, B., Scherzer, M., Cap, S., Willinger, M. G., Guo, J.-H., Schlögl, R., & Knop-Gericke, A. (2016). Exploring the incorporation of nitrogen in titanium and its influence on the electrochemical corrosion resistance in acidic media. *Surface Science*, 650, 272-278. doi:10.1016/j.susc.2016.01.007.

Vieira, J. M., Baghizadeh, A., Amaral, J. S., Gonçalves, J. N., Almeida, B. A., Willinger, M. G., & Amaral, V. S. (2016). Assessing Segregation Effects on Multiferroic Properties of Antiferromagnetic-Weak Ferromagnetic Coupled Systems by Analytical HRTEM. *Microscopy and Microanalysis*, 22(S4), 58-59. doi:10.1017/S1431927616000489.

Volykhov, A. A., Sánchez-Barriga, J., Sirotina, A. P., Neudachina, V. S., Frolov, A. S., Gerber, E. A., Kataev, E. Y., Senkovsky, B., Khmelevsky, N. O., Aksenenko, A. Y., Korobova, N. V., Knop-Gericke, A., Rader, O., & Yashina, L. V. (2016). Rapid Surface Oxidation of Sb<sub>2</sub>Te<sub>3</sub> as Indication for a Universal Trend in the Chemical Reactivity of Tetradymite Topological Insulators. *Chemistry of Materials*, 28(24), 8916-8923. doi:10.1021/acs.chemmater.6b03325.

- Wang, J., Huang, R., Feng, Z., Liu, H., & Su, D. S. (2016). Multi-Walled Carbon Nanotubes as a Catalyst for Gas-Phase Oxidation of Ethanol to Acetaldehyde. *ChemSusChem*, 9(14), 1820-1826. doi:10.1002/cssc.201600234.
- Wang, L., Huang, X., Xia, J., Zhu, D., Li, X., & Meng, X. (2016). Three dimensional ZnO nanotube arrays and their optical tuning through formation of type-II heterostructures. *CrystEngComm*, 18(14), 2517-2523. doi:10.1039/C6CE00148C.
- Wang, Z.-J., Dong, J., Cui, Y., Eres, G., Timpe, O., Fu, Q., Ding, F., Schlögl, R., & Willinger, M. G. (2016). Stacking sequence and interlayer coupling in few-layer graphene revealed by in situ imaging. *Nature Communications*, 7: 13256. doi:10.1038/ncomms13256.
- Weatherup, R. S., Shahani, A. J., Wang, Z.-J., Mingard, K., Pollard, A. J., Willinger, M. G., Schlögl, R., Voorhees, P. W., & Hofmann, S. (2016). In Situ Graphene Growth Dynamics on Polycrystalline Catalyst Foils. *Nano Letters*, 16(10), 6196-6206. doi:10.1021/acs.nanolett.6b02459.
- Wehinger, G. D., Kraume, M., Berg, V., Korup, O., Mette, K., Schlögl, R., Behrens, M., & Horn, R. (2016). Investigating dry reforming of methane with spatial reactor profiles and particle-resolved CFD simulations. *AIChE-Journal*, 62(12), 4436-4452. doi:10.1002/aic.15520.
- Willinger, E., Yi, Y., Tarasov, A., Blume, R., Massué, C., Girgsdies, F., Querner, C., Schwab, E., Schlögl, R., & Willinger, M. G. (2016). Atomic-Scale Insight on the Increased Stability of Tungsten-Modified Platinum/Carbon Fuel Cell Catalysts. *ChemCatChem*, 8(8), 1575-1582. doi:10.1002/cctc.201600068.
- Willinger, M. G., Checa, A. G., Bonarski, J. T., Faryna, M., & Berent, K. (2016). Biogenic Crystallographically Continuous Aragonite Helices: The Microstructure of the Planktonic Gastropod *Cuvierina*. *Advanced Functional Materials*, 26(4), 553-561. doi:10.1002/adfm.201504034.
- Xia, J., Zhu, D., Li, X., Wang, L., Tian, L., Li, J., Wang, J., Huang, X., & Meng, X. (2016). Epitaxy of Layered Orthorhombic SnS-SnS<sub>x</sub>Se<sub>(1-x)</sub> Core-Shell Heterostructures with Anisotropic Photoresponse. *Advanced Functional Materials*, 26(26), 4673-4679. doi:10.1002/adfm.201600699.
- Xie, Z., Frank, B., Huang, X., Schlögl, R., & Trunschke, A. (2016). Higher Alcohol Synthesis Over Rh Catalysts: Conditioning of Rh/N-CNTs by Co and Mn Entrapped in the Support. *Catalysis Letters*, 146(12), 2417-2424. doi: 10.1007/s10562-016-1875-6.
- Yildiz, M., Aksu, Y., Simon, U., Otremba, T., Kailasam, K., Göbel, C., Girgsdies, F., Görke, O., Rosowski, F., Thomas, A., Schomäcker, R., & Arndt, S. (2016). Silica material variation for the Mn<sub>x</sub>O<sub>y</sub>-Na<sub>2</sub>WO<sub>4</sub>/SiO<sub>2</sub>. *Applied Surface Science*, 525, 168-179. doi:10.1016/j.apcata.2016.06.034.
- Zhang, B., Niu, Y., Xu, J., Pan, X., Chen, C.-M., Shi, W., Willinger, M. G., Schlögl, R., & Su, D. S. (2016). Tuning the surface structure of supported PtNi<sub>x</sub> bimetallic electrocatalysts for the methanol electro-oxidation reaction. *Chemical Communications*, 52(20), 3927-3930. doi:10.1039/C5CC08978F.
- Zhang, R.-Q., Zhao, Y.-L., Qi, F., Hermann, K., & Van Hove, M. A. (2016). Intramolecular torque, an indicator of the internal rotation direction of rotor molecules and similar systems. *Physical Chemistry Chemical Physics*, 18(43), 29665-29672. doi:10.1039/C6CP05996A.



Zhao, Q., Wang, J., Huang, X., Yao, Y., Zhang, W., & Shao, L. (2016). Copper-enriched palladium-copper alloy nanoparticles for effective electrochemical formic acid oxidation. *Electrochemistry Communications*, 69, 55-58. doi:10.1016/j.elecom.2016.05.021.

Zhao, Y.-L., Zhang, R.-Q., Minot, M., Hermann, K., & Van Hove, M. A. (2016). Computational prediction of optimal metal ions to induce coordinated polymerization of muscle-like [c2]daisy chains. *Physical Chemistry Chemical Physics*, 18(10), 7419-7426. doi:10.1039/C5CP07772A.

Zhu, M., Rocha, T., Lunkenbein, T., Knop-Gericke, A., Schlögl, R., & Wachs, I. E. (2016). Promotion Mechanisms of Iron Oxide-Based High Temperature Water–Gas Shift Catalysts by Chromium and Copper. *ACS Catalysis*, 6(7), 4455-4464. doi:10.1021/acscatal.6b00698.

Ziegler, C., Klosz, S., Borhardt, L., Oschatz, M., Kaskel, S., Friedrich, M., Kriegel, R., Keilhauer, T., Armbrüster, M., & Eychmüller, A. (2016). ZnPd/ZnO Aerogels as Potential Catalytic Materials. *Advanced Functional Materials*, 26(7), 1014-1020. doi:10.1002/adfm.201503000.