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22-Nov-17

Alarcón Villaseca, S., Ormeci, A., Levchenko, S. V., Schlögl, R., Grin, Y., & Armbrüster, M. (2017). CO Adsorption on GaPd—Unravelling the Chemical Bonding in Real Space. *ChemPhysChem*, 18(4), 334-337. doi:10.1002/cphc.201601162.

Andrei, V., Bethke, K., Madzharova, F., Beeg, S., Knop-Gericke, A., Kneipp, J., & Rademann, K. (2017). Size Dependence of Electrical Conductivity and Thermoelectric Enhancements in Spin-Coated PEDOT:PSS Single and Multiple Layers. *Advanced Electronic Materials*, 3(2): 1600473. doi:10.1002/aelm.201600473.

Anke, B., Rohloff, M., Willinger, M. G., Hetaba, W., Fischer, A., & Lerch, M. (2017). Improved photoelectrochemical performance of bismuth vanadate by partial O/F-substitution. *Solid State Sciences*, 63, 1-8. doi:10.1016/j.solidstatesciences.2016.11.004.

Baghizadeh, A., Vieira, J. M., Vaghefi, P. M., Willinger, M. G., & Amaral, V. S. (2017). Development of ferroelectric domains and topological defects in vacancy doped ceramics of h-LuMnO₃. *Journal of Applied Physics*, 122(4): 044102. doi:10.1063/1.4996349.

Baghizadeh, A., Vieira, J. M., Stroppa, D. G., Mirzadeh Vaghefi, P., Graça, M. P., Amaral, J. S., Willinger, M. G., & Amaral, V. S. (2017). Interaction of multiferroic properties and interfaces in hexagonal LuMnO₃ ceramics. *Journal of Physics D*, 50(5): 055304. doi:10.1088/1361-6463/50/5/055304.

Bojer, C., Schöbel, J., Martin, T., Lunkenbein, T., Wagner, D. R., Greiner, A., Breu, J., & Schmalz, H. (2017). Mesostructured ZnO/Au nanoparticle composites with enhanced photocatalytic activity. *Polymer*, 128, 65-70. doi:10.1016/j.polymer.2017.09.008.

Bozzini, B., Amati, M., Mele, C., Knop-Gericke, A., & Vesselli, E. (2017). An in situ near-ambient pressure X-ray Photoelectron Spectroscopy study of CO₂ reduction at Cu in a SOE cell. *Journal of Electroanalytical Chemistry*, 799, 17-25. doi:10.1016/j.jelechem.2017.05.011.

Bukhtiyarova, M., Lunkenbein, T., Kähler, K., & Schlögl, R. (2017). Methanol Synthesis from Industrial CO₂ Sources: A Contribution to Chemical Energy Conversion. *Catalysis Letters*, 147(2), 416-427. doi:10.1007/s10562-016-1960-x.

Bulfin, B., Vieten, J., Starr, D. E., Azarpira, A., Zachäus, C., Hävecker, M., Skorupska, K., Schmücker, M., Roeb, M., & Sattler, C. (2017). Redox chemistry of CaMnO₃ and Ca_{0.8}Sr_{0.2}MnO₃ oxygen storage perovskites. *Journal of Materials Chemistry A*, 2017(5), 7912-7919. doi:DOI: 10.1039/c7ta00822h.

Chakrapani, K., Bendt, G., Hajiyani, H., Schwarzrock, I., Lunkenbein, T., Salamon, S., Landers, J., Wende, H., Schlögl, R., Pentcheva, R., Behrens, M., & Schulz, S. (2017). Role of Composition and Size of Cobalt Ferrite Nanocrystals in the Oxygen Evolution Reaction. *ChemCatChem*, 9(15), 2988-2995. doi:10.1002/cctc.201700376.

- Chen, S., Meng, L., Chen, B., Chen, W., Duan, X., Huang, X., Zhang, B., Fu, H., & Wan, Y. (2017). Poison Tolerance to the Selective Hydrogenation of Cinnamaldehyde in Water over an Ordered Mesoporous Carbonaceous Composite Supported Pd Catalyst. *ACS Catalysis*, 7(3), 2074-2087. doi:10.1021/acscatal.6b02720.
- Chen, Z., Savateev, A., Pronkin, S., Papaefthimiou, V., Wolff, C., Willinger, M. G., Willinger, E., Neher, D., Antonietti, M., & Dontsova, D. (2017). "The Easier the Better" Preparation of Efficient Photocatalysts—Metastable Poly(heptazine imide) Salts. *Advanced Materials*, 29(32): 1700555. doi:10.1002/adma.201700555.
- Dilla, M., Schlögl, R., & Strunk, J. (2017). Photocatalytic CO₂ Reduction Under Continuous Flow High-Purity Conditions: Quantitative Evaluation of CH₄ Formation in the Steady-State. *ChemCatChem*, 9(4), 696-704. doi:10.1002/cctc.201601218.
- Düngen, P., Prenzel, M., Van Stappen, C., Pfänder, N., Heumann, S., & Schlögl, R. (2017). Investigation of Different Pre-Treated Multi-Walled Carbon Nanotubes by Raman Spectroscopy. *Materials Sciences and Applications*, 8(8), 628-641. doi:10.4236/msa.2017.88044.
- Friedel Ortega, K., Rein, D., Lüttmann, C., Heese, J., Özcan, F., Heidelmann, M., Folke, J., Kähler, K., Schlögl, R., & Behrens, M. (2017). Ammonia Decomposition and Synthesis over Multinary Magnesioferrites: Promotional Effect of Ga on Fe Catalysts for the Decomposition Reaction. *ChemCatChem*, 9(4), 659-671. doi:10.1002/cctc.201601355.
- Friedel Ortega, K., Anke, S., Salamon, S., Özcan, F., Heese, J., Andronescu, C., Landers, J., Wende, H., Schuhmann, W., Muhler, M., Lunkenbein, T., & Behrens, M. (2017). Topotactic Synthesis of Porous Cobalt Ferrite Platelets from a Layered Double Hydroxide Precursor and Their Application in Oxidation Catalysis. *Chemistry – A European Journal*, 23(51), 12443-12449. doi:10.1002/chem.201702248.
- Friedrich, B., & James, J. (2017). From Berlin-Dahlem to the Fronts of WWI: The Role of Fritz Haber and his Kaiser Wilhelm Institute in German Chemical Warfare. In B. Friedrich, D. Hoffmann, J. Renn, F. Schmaltz, & M. Wolf (Eds.), *One Hundred Years of Chemical Warfare: Research, Deployment, Consequences*. Springer.
- Greiner, M., Jones, T., Klyushin, A., Knop-Gericke, A., & Schlögl, R. (2017). Ethylene Epoxidation at the Phase Transition of Copper Oxides. *Journal of the American Chemical Society*, 139(34), 11825-11832. doi:10.1021/jacs.7b05004.
- Häusler, I., Schwarze, C., Bilal, M. U., Ramirez, D. V., Hetaba, W., Kamachali, R. D., & Skrotzki, B. (2017). Precipitation of T₁ and θ' Phase in Al-4Cu-1Li-0.25Mn During Age Hardening: Microstructural Investigation and Phase-Field Simulation. *Materials*, 10(2): 117. doi:10.3390/ma10020117.
- Hermann, K. (2017). *Crystallography and Surface Structure: An Introduction for Surface Scientists and Nanoscientists* (2., Revised and Expanded Edition). Weinheim: Wiley-VCH. doi:10.1002/9783527697137.

Huang, R., Zhang, B., Wang, J., Wu, K.-H., Shi, W., Zhang, Y., Liu, Y., Zheng, A., Schlögl, R., & Su, D. S. (2017). Direct Insight into Ethane Oxidative Dehydrogenation over Boron Nitrides. *ChemCatChem*. doi:10.1002/cctc.201700725.

Huang, X., Jones, T., Fan, H., & Willinger, M. G. (2017). Real-time atomic scale observation of void formation and anisotropic growth in II–VI semiconducting ribbons. *Nanoscale*. doi: 10.1039/C7NR02231J.

Kaichev, V. V., Saraev, A. A., Gladky, A. Y., Prosvirin, I. P., Blume, R., Teschner, D., Hävecker, M., Knop-Gericke, A., Schlögl, R., & Bukhtiyarov, V. I. (2017). Reversible Bulk Oxidation of Ni Foil During Oscillatory Catalytic Oxidation of Propane: A Novel Type of Spatiotemporal Self-Organization. *Physical Review Letters*, 119(2): 026001. doi:10.1103/PhysRevLett.119.026001.

Karpinsky, D. V., Troyanchuk, I. O., Willinger, M. G., Khomchenko, V. A., Salak, A. N., Sikolenko, V., & Silibin, M. V. (2017). Intermediate structural state in $\text{Bi}_{1-x}\text{Pr}_x\text{FeO}_3$ ceramics at the rhombohedral–orthorhombic phase boundary. *Journal of Materials Science*, 52(16), 9355-9362. doi:10.1007/s10853-017-1152-0.

Klokishner, S., Reu, O., Noack, J., Schlögl, R., & Trunschke, A. (2017). Experimental Study and Modeling of the UV–Vis and Infrared Spectra of the $[\text{VO}(\text{O}_2)\text{Hheida}]^-$ Complex Dissolved in Water. *The Journal of Physical Chemistry A*, 121(38), 7157-7164. doi:10.1021/acs.jpca.7b07128.

Knop-Gericke, A., Pfeifer, V., Velasco Vélez, J., Jones, T., Arrigo, R., Hävecker, M., & Schlögl, R. (2017). In situ X-ray photoelectron spectroscopy of electrochemically active solid-gas and solid-liquid interfaces. *Journal of Electron Spectroscopy and Related Phenomena*. doi:10.1016/j.elspec.2017.03.010.

Köpfle, N., Mayr, L., Schmidmair, D., Bernardi, J., Knop-Gericke, A., Hävecker, M., Klötzer, B., & Penner, S. (2017). A Comparative Discussion of the Catalytic Activity and CO_2 -Selectivity of Cu-Zr and Pd-Zr (Intermetallic) Compounds in Methanol Steam Reforming. *Catalysts*, 7(2): 53. doi:10.3390/catal7020053.

Kubas, A., Noack, J., Trunschke, A., Schlögl, R., Neese, F., & Maganas, D. (2017). A combined experimental and theoretical spectroscopic protocol for determination of the structure of heterogeneous catalysts: developing the information content of the resonance Raman spectra of M1 MoVO_x . *Chemical Science*, 8(9), 6338-6252. doi:10.1039/c7sc01771e.

Kube, P., Frank, B., Wrabetz, S., Kröhnert, J., Hävecker, M., Velasco Vélez, J., Noack, J., Schlögl, R., & Trunschke, A. (2017). Functional Analysis of Catalysts for Lower Alkane Oxidation. *ChemCatChem*, 9(4), 573-585. doi:10.1002/cctc.201601194.

Kube, P., Frank, B., Schlögl, R., & Trunschke, A. (2017). Isotope Studies in Oxidation of Propane over Vanadium Oxide. *ChemCatChem*, 9(18), 3446-3455. doi:10.1002/cctc.201700847.

Kühl, S., Düdder, H., Girgsdies, F., Kähler, K., Muhler, M., & Behrens, M. (2017). Perovskites as Precursors for $\text{Ni/La}_2\text{O}_3$ Catalysts in the Dry Reforming of Methane: Synthesis by Constant pH Co-Precipitation, Reduction Mechanism and Effect of Ru-Doping. *Zeitschrift für anorganische und allgemeine Chemie*, 643(16), 1088-1095. doi:10.1002/zaac.201700141.

- Le, H. V., Parishan, S., Sagaltchik, A., Göbel, C., Schlesiger, C., Malzer, W., Trunschke, A., Schomäcker, R., & Thomas, A. (2017). Solid-State Ion-Exchanged Cu/Mordenite Catalysts for the Direct Conversion of Methane to Methanol. *ACS Catalysis*, 7(2), 1403-1412. doi:10.1021/acscatal.6b02372.
- Lin, Y., Wu, K.-H.-(. Yu, L., Heumann, S., & Su, D. S. (2017). Efficient and Highly Selective Solvent-Free Oxidation of Primary Alcohols to Aldehydes Using Bucky Nanodiamond. *ChemSusChem*, 10(17), 3497 -3505. doi:10.1002/cssc.201700968.
- Lin, Y., Feng, Z., Yu, L., Gu, Q., Wu, S., & Su, D. S. (2017). Insights into the surface chemistry and electronic properties of sp^2 and sp^3 -hybridized nanocarbon materials for catalysis. *Chemical Communications*, 53(35), 4834-4837. doi:10.1039/c7cc02354e.
- Liu, J., Jiao, M., Lu, L., Barkholtz, H. M., Li, Y., Wang, Y., Jiang, L., Wu, Z., Liu, D.-j., Zhuang, L., Ma, C., Zeng, J., Zhang, B., Su, D. S., Song, P., Xing, W., Xu, W., Wang, Y., Jiang, Z., & Sun, G. (2017). High performance platinum single atom electrocatalyst for oxygen reduction reaction. *Nature Communications*, 8: 15938. doi:10.1038/ncomms15938.
- Losch, P., Pinar, A. B., Willinger, M. G., Soukup, K., Chavan, S., Vincent, B., Pale, P., & Louis, B. (2017). H-ZSM-5 zeolite model crystals: Structure-diffusion-activity relationship in methanol-to-olefins catalysis. *Journal of Catalysis*, 345, 11-23. doi:10.1016/j.jcat.2016.11.005.
- Macías-Sánchez, E., Willinger, M. G., Pina, C. M., & Checa, A. G. (2017). Transformation of ACC into aragonite and the origin of the nanogranular structure of nacre. *Scientific Reports*, 2017(7): 12728. doi:10.1038/s41598-017-12673-0.
- Mandić, V., Plodinec, M., Kereković, I., Juraić, K., Janicki, V., Gracin, D., Gajović, A., Moguš-Milanković, A., & Willinger, M. G. (2017). Tailoring anatase nanotubes for the photovoltaic device by the anodization process on behalf of microstructural features of titanium thin film. *Solar Energy Materials and Solar Cells*, 168, 136-145. doi:10.1016/j.solmat.2017.04.028.
- Manshina, A. A., Povolotskaya, A. V., Petrov, Y. V., Willinger, E., Willinger, M. G., Banzer, P., & Leuchs, G. (2017). Novel 2D carbon allotrope intercalated with Au-Ag nanoclusters: from laser design to functionality. In *Proceedings of Advanced Photonics 2017 (IPR, NOMA, Sensors, Networks, SPPCom, PS)*. Washington, DC: OSA. doi:10.1364/NOMA.2017.NoTu2C.4.
- Massué, C., Pfeifer, V., Huang, X., Noack, J., Tarasov, A., Cap, S., & Schlögl, R. (2017). High-Performance Supported Iridium Oxohydroxide Water Oxidation Electrocatalysts. *ChemSusChem*, 10(9), 1943-1957. doi:10.1002/cssc.201601817.
- Massué, C., Huang, X., Tarasov, A., Ranjan, C., Cap, S., & Schlögl, R. (2017). Microwave-Assisted Synthesis of Stable and Highly Active Ir Oxohydroxides for Electrochemical Oxidation of Water. *ChemSusChem*, 10(9), 1958-1968. doi:10.1002/cssc.201601864.
- Massué, C., Pfeifer, V., Gastel, M. v., Noack, J., Algara-Siller, G., Cap, S., & Schlögl, R. (2017). Reactive electrophilic $O^{\cdot-}$ -species evidenced in high-performance Ir-oxohydroxide water oxidation electrocatalysts. *ChemSusChem*. doi:10.1002/cssc.201701291.

Mirzadeh Vaghefi, P., Baghizadeh, A., Willinger, M. G., Pereira, M. J., Mota, D. A., Almeida, B. G., Agostinho Moreira, J., & Amaral, V. S. (2017). Thickness dependence of microstructure in thin $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ films grown on (1 0 0) SrTiO_3 substrate. *Journal of Physics D*, 50(39): 395301. doi:10.1088/1361-6463/aa80bf.

Opitz, A. K., Nenning, A., Rameshan, C., Kubicek, M., Götsch, T., Blume, R., Hävecker, M., Knop-Gericke, A., Rupprechter, G., Klötzer, B., & Fleig, J. (2017). Surface Chemistry of Perovskite-Type Electrodes during High Temperature CO_2 Electrolysis Investigated by Operando Photoelectron Spectroscopy. *ACS Applied Materials and Interfaces*, 9(41), 35847-35860. doi:10.1021/acsami.7b10673.

Papaefthimiou, V., Niakolas, D. K., Paloukis, F., Teschner, D., Knop-Gericke, A., Hävecker, M., & Zafeiratos, S. (2017). Operando observation of nickel/ceria electrode surfaces during intermediate temperature steam electrolysis. *Journal of Catalysis*, 352, 305-313. doi:10.1016/j.jcat.2017.06.005.

Pavlopoulos, N. G., Dubose, J. T., Liu, Y., Huang, X., Pinna, N., Willinger, M. G., Lian, T., Char, K., & Yun, J. (2017). Type I vs. quasi-type II modulation in CdSe@CdS tetrapods: ramifications for noble metal tipping. *CrystEngComm*. doi:10.1039/c7ce01558e.

Pfeifer, V., Jones, T., Velasco Vélez, J., Arrigo, R., Piccinin, S., Hävecker, M., Knop-Gericke, A., & Schlögl, R. (2017). In situ observation of reactive oxygen species forming on oxygen-evolving iridium surfaces. *Chemical Science*, 8(3), 2143-2149. doi:10.1039/C6SC04622C.

Poitel, S., Wang, Z.-J., Willinger, M. G., Van herle, J., & Hébert, C. (2017). In-situ Observation of Co-Ce Coated Metallic Interconnect Oxidation Combined with High-Resolution Post Exposure Analysis. *ECS Transactions*, 78(1), 1615-1632. doi:10.1149/07801.1615ecst.

Püttner, R., Schmidt-Weber, P. M., Kampen, T., Kolczewski, C., Hermann, K., & Horn, K. (2017). Identification of isomers in the gas phase and as adsorbates by near-edge X-ray absorption fine structure spectroscopy: Cis- and trans-stilbene. *Journal of Electron Spectroscopy and Related Phenomena*, 215, 16-21. doi:10.1016/j.elspec.2016.11.014.

Rao, R. G., Blume, R., Hansen, T. W., Fuentes, E., Dreyer, K., Moldovan, S., Ersen, O., Hibbitts, D. D., Chabal, Y. J., Schlögl, R., & Tessonnier, J.-P. (2017). Interfacial charge distributions in carbon-supported palladium catalysts. *Nature Communications*, 8: 340. doi:10.1038/s41467-017-00421-x.

Reier, T., Nong, H. N., Teschner, D., Schlögl, R., & Strasser, P. (2017). Electrocatalytic Oxygen Evolution Reaction in Acidic Environments – Reaction Mechanisms and Catalysts. *Advanced Energy Materials*, 7(1): 1601275. doi:10.1002/aenm.201601275.

Rudi, S., Teschner, D., Beermann, V., Hetaba, W., Gan, L., Cui, C., Gliech, M., Schlögl, R., & Strasser, P. (2017). pH-Induced Versus Oxygen-Induced Surface Enrichment And Segregation Effects In Pt-Ni Alloy Nanoparticle Fuel Cell Catalysts. *ACS Catalysis*, 7, 6376-6384. doi:10.1021/acscatal.7b00996.

Rupflin, L. A., Mormul, J., Lejkowski, M., Titlbach, S., Papp, R., Gläser, R., Dimitrakopoulou, M., Huang, X., Trunschke, A., Willinger, M. G., Schlögl, R., Rosowski, F., & Schunk, S. A. (2017). Platinum Group Metal Phosphides as Heterogeneous Catalysts for the Gas-Phase Hydroformylation of Small Olefins. *ACS Catalysis*, 7(5), 3584-3590. doi:10.1021/acscatal.7b00499.

Savateev, A., Pronkin, S., Epping, J. D., Willinger, M. G., Wolff, C., Neher, D., Antonietti, M., & Dontsova, D. (2017). Potassium Poly(heptazine imides) from Aminotetrazoles: Shifting Band Gaps of Carbon Nitride-like Materials for More Efficient Solar Hydrogen and Oxygen Evolution. *ChemCatChem*, 9(1), 167-174. doi:10.1002/cctc.201601165.

Savateev, A., Pronkin, S., Epping, J. D., Willinger, M. G., Antonietti, M., & Dontsova, D. (2017). Synthesis of electronically modified carbon nitride from a processable semiconductor, 3-aminotriazole-1,2,4 oligomer, via a topotactic-like phase transition. *Journal of Materials Chemistry A*, 5(18), 8394-8401. doi:10.1039/C7TA01714F.

Savateev, A., Pronkin, S., Willinger, M. G., Antonietti, M., & Dontsova, D. (2017). Towards Organic Zeolites and Inclusion Catalysts: Heptazine Imide Salts Can Exchange Metal Cations in the Solid State. *Chemistry – An Asian Journal*, 12(13), 1517-1522. doi:10.1002/asia.201700209.

Schieder, M., Bojer, C., Stein, J. v., Koch, S., Martin, T., Schmalz, H., Breu, J., & Lunkenbein, T. (2017). Template Removal via Boudouard Equilibrium Allows for Synthesis of Mesostructured Molybdenum Compounds. *Angewandte Chemie*, 129. doi:10.1002/ange.201610786.

Schieder, M., Bojer, C., Stein, J. v., Koch, S., Martin, T., Schmalz, H., Breu, J., & Lunkenbein, T. (2017). Template Removal via Boudouard Equilibrium Allows for Synthesis of Mesostructured Molybdenum Compounds. *Angewandte Chemie International Edition*, 56(45), 13968-13972. doi:10.1002/anie.201610786.

Schlögl, R. (2017). Catalysis 4.0. *ChemCatChem*, 9(4), 533-541. doi:10.1002/cctc.201700026.

Schlögl, R. (2017). Chemical energy storage: Part of a systemic solution. *EPJ Web of Conferences*, 148: 00015. doi:10.1051/epjconf/201714800015.

Schlögl, R. (2017). Inside Back Cover: Catalysis 4.0. *ChemCatChem*, 9(4), 713-713. doi:10.1002/cctc.201700203.

Schmies, H., Bergmann, A., Drnec, J., Wang, G., Teschner, D., Kühl, S., Sandbeck, D. J. S., Cherevko, S., Gocyla, M., Shviro, M., Heggen, M., Ramani, V., Dunin-Borkowski, R. E., Mayrhofer, K. J. J., & Strasser, P. (2017). Unravelling Degradation Pathways of Oxide-Supported Pt Fuel Cell Nanocatalysts under In Situ Operating Conditions. *Advanced Energy Materials*, 1701663. doi:10.1002/aenm.201701663.

Schön, D., Golnak, R., Tesch, M. F., Winter, B., Velasco Vélez, J., Aziz, E. F., & Xiao, J. (2017). Bulk-Sensitive Detection of the Total Ion Yield for X-ray Absorption Spectroscopy in Liquid Cells. *The Journal of Physical Chemistry Letters*, 8(20), 5136-5140. doi:10.1021/acs.jpcclett.7b02381.

Schön, D., Xiao, J., Golnak, R., Tesch, M. F., Winter, B., Velasco Vélez, J., & Aziz, E. F. (2017). Introducing Ionic-Current Detection for X-ray Absorption Spectroscopy in Liquid Cells. *The Journal of Physical Chemistry Letters*, 8(9), 2087-2092. doi:10.1021/acs.jpcclett.7b00646.

Schumann, J., Kröhnert, J., Frei, E., Schlögl, R., & Trunschke, A. (2017). IR-Spectroscopic Study on the Interface of Cu-Based Methanol Synthesis Catalysts: Evidence for the Formation of a ZnO Overlayer. *Topics in Catalysis*. doi:10.1007/s11244-017-0850-9.

Seo, J., Hoffmann, W., Warnke, S., Huang, X., Gewinner, S., Schöllkopf, W., Bowers, M. T., Helden, G. v., & Pagel, K. (2017). An infrared spectroscopy approach to follow β -sheet formation in peptide amyloid assemblies. *Nature Chemistry*, 9(1), 39-44. doi:10.1038/nchem.2615.

Su, D. S., Wen, G., Wu, S., Peng, F., & Schlögl, R. (2017). Carbocatalysis in Liquid-Phase Reactions. *Angewandte Chemie International Edition*, 56(4), 936-964. doi:10.1002/anie.201600906.

Su, D. S., Wen, G., Wu, S., Peng, F., & Schlögl, R. (2017). Carbokatalyse in Flüssigphasenreaktionen. *Angewandte Chemie*, 129(4), 956-985. doi:10.1002/ange.201600906.

Sun, J., Xu, J., Grafmueller, A., Huang, X., Liedel, C., Algara-Siller, G., Willinger, M. G., Yang, C., Fu, Y., Wang, X., & Shalom, M. (2017). Self-assembled carbon nitride for photocatalytic hydrogen evolution and degradation of p-nitrophenol. *Applied Catalysis B*, 205, 1-10. doi:10.1016/j.apcatb.2016.12.030.

Thomas, J., Thomas, N., Girgsdies, F., Behrens, M., Huang, X., Sudheesh, V. D., & Sebastian, V. (2017). Synthesis of cobalt ferrite nanoparticles by constant pH co-precipitation and their high catalytic activity in CO oxidation. *New Journal of Chemistry*, 41(15), 7356-7363. doi:10.1039/c7nj00558j.

Trunschke, A., Noack, J., Trojanov, S., Girgsdies, F., Lunkenbein, T., Pfeifer, V., Hävecker, M., Kube, P., Sprung, C., Rosowski, F., & Schlögl, R. (2017). The Impact of the Bulk Structure on Surface Dynamics of Complex Mo–V-based Oxide Catalysts. *ACS Catalysis*, 7(4), 3061-3071. doi:10.1021/acscatal.7b00130.

Vaghefia, P. M., Baghizadeh, A., Willinger, M. G., Lourenço, A., & Amaral, V. (2017). Effect of lattice mismatch on the magnetic properties of nanometer-thick $\text{La}_{0.9}\text{Ba}_{0.1}\text{MnO}_3$ (LBM) films and LBM/BaTiO₃/LBM heterostructures. *Applied Surface Science*, 425, 988-995. doi:10.1016/j.apsusc.2017.06.252.

Velasco Vélez, J., Hävecker, M., Knop-Gericke, A., Schwanke, C., Xi, L., Lange, L. M., Xiao, J., Tesch, M. F., Golnak, R., Petit, T., Puskar, L., Schade, U., Borgwardt, M., Kiyani, I., Seidel, R., & Aziz, E. F. (2017). Multiscale Photo-Based In-Situ and Operando Spectroscopies in Time and Energy Landscapes. *Synchrotron Radiation News*, 30(2), 14-19. doi:10.1080/08940886.2017.1289800.

Velasco Vélez, J., Skorupska, K., Frei, E., Huang, Y.-C., Dong, C.-L., Su, B.-J., Hsu, C.-J., Chou, H.-Y., Chen, J.-M., Strasser, P., Schlögl, R., Knop-Gericke, A., & Chuang, C.-H. (2017). The Electro-Deposition/Dissolution of CuSO_4 Aqueous Electrolyte Investigated by In Situ Soft X-ray Absorption Spectroscopy. *The Journal of Physical Chemistry B*. doi:10.1021/acs.jpccb.7b06728.

Velasco Vélez, J., Jones, T., Pfeifer, V., Dong, C.-L., Chen, Y.-X., Chen, C.-M., Chen, H.-Y., Lu, Y.-R., Chen, J.-M., & Schlögl, R. (2017). Trends in reactivity of electrodeposited 3d transition metals on gold revealed by operando soft x-ray absorption spectroscopy during water splitting. *Journal of Physics D*, 50(2): 024002. doi:10.1088/1361-6463/50/2/024002.

Völter, J., & Schlögl, R. (2017). 50 Years of German Catalysis Meetings: From Twin Roots to a Joint Success Story. *ChemCatChem*, 9(2), 527-532. doi:10.1002/cctc.201700011.

- Wang, B., Wen, G., & Su, D. S. (2017). Determination of the acidic properties of carboxylated carbocatalysts in an acid-catalyzed ring-opening reaction using kinetic profiling. *Nano Research*, *10*(9), 2954-2965. doi:10.1007/s12274-017-1506-6.
- Wang, J., Teschner, D., Yuanying, Y., Huang, X., Willinger, M. G., Shao, L., & Schlögl, R. (2017). Fabrication of nanoscale NiO/Ni heterostructures as electrocatalysts for efficient methanol oxidation. *Journal of Materials Chemistry A*, *5*(20), 9946-9951. doi:10.1039/c7ta01982c.
- Wang, J., Teschner, D., Huang, X., Yao, Y., Willinger, M. G., Shao, L., & Schlögl, R. (2017). Nanosized palladium on holey graphene sheets incorporating P_xO_y for effective formic acid oxidation. *Electrochemistry Communications*, *74*, 24-27. doi:10.1016/j.elecom.2016.11.012.
- Wang, J., Xie, Y., Yao, Y., Huang, X., Willinger, M. G., & Shao, L. (2017). Ni/NiO nanoparticles on a phosphorous oxide/graphene hybrid for efficient electrocatalytic water splitting. *Journal of Materials Chemistry A*, *5*(28), 14758-14762. doi: 10.1039/C7TA03628K.
- Wang, L., Xiong, K., He, Y., Huang, X., Xia, J., Li, X., Gu, Y., Cheng, H., & Meng, X. (2017). Epitaxial growth of wafer-scale two-dimensional polytypic ZnS thin films on ZnO substrates. *CrystEngComm*, *19*(17), 2294-2299. doi:10.1039/c7ce00428a.
- Wang, Y., Widmann, D., Heenemann, M., Diemant, T., Biskupek, J., Schlögl, R., & Behm, J. (2017). The role of electronic metal-support interactions and its temperature dependence: CO adsorption and CO oxidation on Au/TiO₂ catalysts in the presence of TiO₂ bulk defects. *Journal of Catalysis*, *354*, 46-60. doi:10.1016/j.jcat.2017.07.029.
- Wen, G., Wang, B., Wang, C., Wang, J., Tian, Z., Schlögl, R., & Su, D. S. (2017). Hydrothermal Carbon Enriched with Oxygenated Groups from Biomass Glucose as an Efficient Carbocatalyst. *Angewandte Chemie International Edition*, *56*(2), 600-604. doi:10.1002/anie.201609047.
- Wen, G., Wang, B., Wang, C., Wang, J., Tian, Z., Schlögl, R., & Su, D. S. (2017). Hydrothermal Carbon Enriched with Oxygenated Groups from Biomass Glucose as an Efficient Carbocatalyst. *Angewandte Chemie*, *129*(2), 615-619. doi:10.1002/ange.201609047.
- Willinger, E., Tarasov, A., Blume, R., Rinaldi, A., Timpe, O., Massué, C., Scherzer, M., Noack, J., Schlögl, R., & Willinger, M. G. (2017). Characterization of the Platinum–Carbon Interface for Electrochemical Applications. *ACS Catalysis*, *7*(7), 4395-4407. doi:10.1021/acscatal.7b00614.
- Willinger, E., Massué, C., Schlögl, R., & Willinger, M. G. (2017). Identifying key structural features of IrO_x water splitting catalysts. *Journal of the American Chemical Society*, *139*(34), 12093-12101. doi:10.1021/jacs.7b07079.
- Xie, Y., Wang, J., Huang, X., Luo, B., Yu, W., & Shao, L. (2017). Palladium nanoparticles supported on graphene sheets incorporating boron oxides (B_xO_y) for enhanced formic acid oxidation. *Electrochemistry Communications*, *74*, 48-52. doi:10.1016/j.elecom.2016.12.001.
- Xiong, H., Lester, K., Ressler, T., Schlögl, R., Allard, L. F., & Datye, A. K. (2017). Metastable Pd ↔ PdO Structures During High Temperature Methane Oxidation. *Catalysis Letters*, *147*(5), 1095-1103. doi:10.1007/s10562-017-2023-7.

Yi, Y., Weinberg, G., Prenzel, M., Greiner, M., Heumann, S., Becker, S., & Schlögl, R. (2017). Electrochemical corrosion of a glassy carbon electrode. *Catalysis Today*, 295, 32-40. doi:10.1016/j.cattod.2017.07.013.

Zhu, B., Tang, C. H., Xu, H. Y., Su, D. S., Zhang, J., & Li, H. (2017). Surface activation inspires high performance of ultra-thin Pd membrane for hydrogen separation. *Journal of Membrane Science*, 526, 138-146. doi:10.1016/j.memsci.2016.12.025.

Zhu, Q., Kondo, J. N., & Tatsumi, T. (2018). Co-reaction of methanol and ethylene over MFI and CHA zeolitic catalysts. *Microporous and Mesoporous Materials*, 255, 174-184. doi:10.1016/j.micromeso.2017.07.030.