





A. Trunschke

The author presented on this page has recently published her **10th article** in Angewandte Chemie in the last 10 years:

"Direct Imaging of Octahedral Distortion in a Complex Molybdenum Vanadium Mixed Oxide": T. Lunkenbein et al., Angew. Chem. Int. Ed. 2015, 54, 6828; Angew. Chem. 2015, 127, 6932.

Annette Trunschke

Date of birth: November 7, 1961

Position: Group Leader in the Department of Inorganic Chemistry, Fritz Haber Institute of the Max

Planck Society, Berlin

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Education: 1980–1985 Diploma in Chemistry, University of Jena

1986-1990 PhD supervised by Hans Miessner, Central Institute of Physical Chemistry, Berlin

1991 Postdoc with Helmut Knözinger, Ludwig-Maximilians-Universität München

Awards: 1991 Alexander von Humboldt Research Fellowship

Current research Heterogeneous catalysis; inorganic chemistry of catalyst preparation; development of in situ interests: techniques to study the synthesis of nanostructured materials; characterization and quantifi-

techniques to study the synthesis of nanostructured materials; characterization and quantification of active sites; in situ spectroscopic studies; activation of hydrocarbon molecules at oxide

surfaces

Hobbies: Running, hiking, gardening

My favorite food is Japanese noodle soup, preferably with udon.

My favorite song is Wild Horses by The Rolling Stones.

My favorite quote is "Don't waste time looking for obstacles that may not be there." (Franz Kafka).

The most significant scientific advance of the last 100 years has been the discovery and description of the quantum nature of matter.

The biggest problem that scientists face is the barrier to go beyond current models of thinking.

When I'm frustrated, I go for a run around a lake.

My favorite place on earth is my garden.

My best investment was the time I spent with my children.

If I were not a scientist, I would be a painter.

My worst nightmare is to find typos in our published manuscripts.

The most exciting thing about my research is that it requires so much collaboration.

The best advice I have ever been given is to study chemistry.

can never resist ice cream with strawberries.

My 5 top papers:

- "Dynamics of the MoVTeNb Oxide M1 Phase in Propane Oxidation": A. Celaya Sanfiz, T. W. Hansen, D. Teschner, P. Schnörch, F. Girgsdies, A. Trunschke, R. Schlögl, M. H. Looi, S. B. A. Hamid, *J. Phys. Chem.* C 2010, 114, 1912. (Surface termination according to the perfect bulk crystal structure is not as important as often supposed in oxidation catalysis.)
- "In Situ Generation of Active Sites in Olefin Metathesis": K. Amakawa, S. Wrabetz, J. Kröhnert, G. Tzolova-Müller, R. Schlögl, A. Trunschke, J. Am. Chem. Soc. 2012, 134, 11462. (A new reaction mechanism that takes into account the interplay between redox and acid-base functionalities of SiO₂-anchored molecular molybdenum oxo species.)
- 3. "Aiding the Self-Assembly of Supramolecular Polyoxometalates under Hydrothermal Conditions To Give Precursors of Complex Functional Oxides": M. San-

- chez Sanchez, F. Girgsdies, M. Jastak, P. Kube, R. Schlögl, A. Trunschke, *Angew. Chem. Int. Ed.* **2012**, *51*, 7194; *Angew. Chem.* **2012**, *124*, 7306. (Modular synthesis of structural building blocks by stepwise addition of precursor compounds.)
- "How Strain Affects the Reactivity of Surface Metal Oxide Catalysts": K. Amakawa, L. Sun, C. Guo, M. Hävecker, P. Kube, I. E. Wachs, S. Lwin, A. I. Frenkel, A. Patlolla, K. Hermann, R. Schlögl, A. Trunschke, Angew. Chem. Int. Ed. 2013, 52, 13553; Angew. Chem. 2013, 125, 13796. (The frustration of surface metal oxide species (strain) is an important and novel descriptor for catalysis over supported metal oxides.)
- "Speciation of Molybdates under Hydrothermal Conditions": J. Noack, F. Rosowski, R. Schlögl, A. Trunschke, Z. Anorg. Allg. Chem. 2014, 640, 2730. (Illustrates the power of in situ spectroscopy.)

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