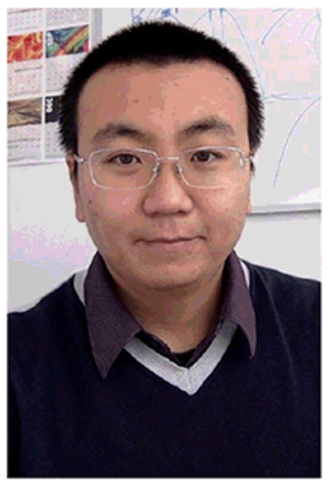
PAUL SCHERRER INSTITUT

PSI facilities newsletter

https://www.psi.ch/science/facility-newsletter

Swiss Light Source Research Highlights

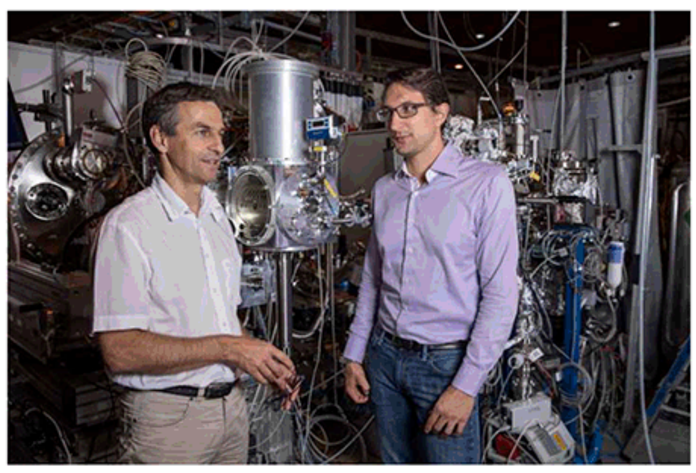


Dr. Nan Xu awarded Swiss Physical Society (SPS) 2017 Prize in Condensed Matter Physics

The SPS 2017 Prize in Condensed Matter Physics, sponsored by IBM, has been awarded to Dr. Nan Xu for his excellent work on topological quantum states. Dr. Nan Xu is a joint postdoc of Paul Scherrer Institute (PSI) and the École Polytechnique Fédérale de Lausanne (EPFL).
Read more: http://www.sps.ch/en/sps-award/sps-awards-2017/

Atmosphere in X-ray light

Luca Artiglia, Jacinta Edebeli, Fabrizio Orlando, Shuzhen Chen, Ming-Tao Lee, Pablo Corral Arroyo, Anina Gilgen, Thorsten Bartels-Rausch, Armin Kleibert, Mario Vazdar, Marcelo Andres Carignano, Joseph S. Francisco, Paul B. Shepson, Ivan Gladich, and Markus Ammann
Nature Communications, DOI: 10.1038/s41467-017-00823-x



PSI researchers have developed an experimental chamber in which they can recreate atmospheric processes and probe them with unprecedented precision, using X-ray light from the Swiss Light Source SLS. In the initial experiments, they have studied the production of bromine, which plays an essential role in the decomposition of ozone in the lower layers of the atmosphere. In the future, the new experiment chamber will also be available for use by researchers from other scientific fields. Read more: https://www.psi.ch/sls/scientific-highlights-and-news

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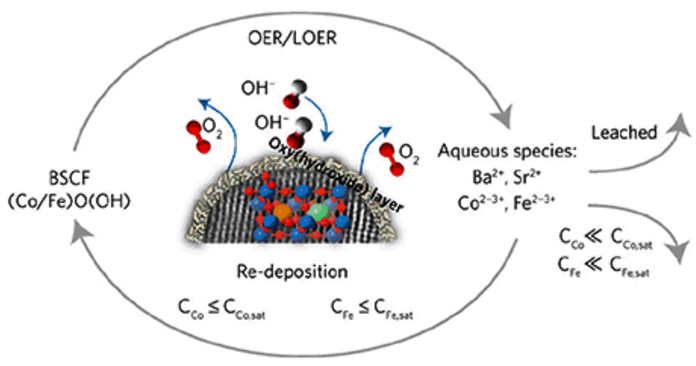
Nanomaterial helps store solar energy: efficiently and inexpensively

Emiliana Fabbri, Maarten Nachtegaal, Tobias Binniger, Xi Cheng, Bae-Jung Kim, Julien Durst, Francesco Bozza, Thomas J. Graule, Robin Schäublin, Luke H. Wiles, Morgan Petroso, Nemanja Danilovic, Katherine Ayers, Thomas J Schmidt, Nature Materials, 17 July 2017, DOI: 10.1038/nmat4938



By combining a scalable cutting-edge synthesis method with time-resolved X-ray absorption spectros copy measurements, it was possible to capture the dynamic local electronic and geometric structure during realistic operando conditions for highly active OER perovskite nanocatalysts.
Read more: https://www.psi.ch/sls/scientific-highlights-and-news

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