



Showcasing research from the group of Prof. Mizuki Tada at Nagoya University, Japan

In situ 3D X-ray imaging of water distribution in each layer of a membrane electrode assembly of a polymer electrolyte fuel cell

H. Matsui and M. Tada's group is working on the *in situ* visualization of functional materials at work by hard X-ray spectroimaging. This work investigates the 3D imaging of water distribution in each stacking layer of gas diffusion layers and membrane electrode assembly of a polymer electrolyte fuel cell. For the first time, the statistical analysis of the 3D image data sets elucidated physical-chemical trends, which supposed the interference of the electrochemical water production and drainage properties.

As featured in:



See Hirotsuke Matsui,
Mizuki Tada *et al.*,
Phys. Chem. Chem. Phys.,
2024, **26**, 15115.