

Showcasing research from Dr. J.E. Olszówka's team, Department of Nanocatalysis, J. Heyrovsky Institute of Physical Chemistry of the Czech Academy of Sciences, Prague, Czech Republic.

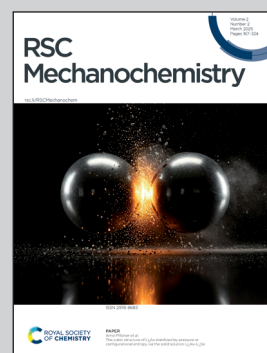
Combined hydrothermal and mechanochemical control of structural modifications of zirconium dioxide for catalytic applications

In this work the influence of hydrothermal treatment and subsequent mechanochemical treatment on the porous and crystalline structure of precipitated zirconium dioxide was studied. Such new synthetic protocol enabled to obtain purephase materials with the stable defected structure for catalytic applications as revealed by as indicated by the results obtained using XRD and UV-vis spectroscopy.

Image reproduced by permission of J. Olszówka from *RSC Mechanochem.*, 2025, **2**, 209.

Image created by Karolina Simkovicova
Image partly generated with AI.

As featured in:



See J. E. Olszowka *et al.*,
RSC Mechanochem., 2025, **2**, 209.