



Showcasing research from Professor Mizugaki's laboratory, Graduate School of Engineering Science, The University of Osaka, Japan.

Upcycling poly(ϵ -caprolactone) into azepane *via* reductive ammonolysis over a titanium oxide-supported platinum catalyst

This work highlights the direct conversion of poly (ϵ -caprolactone) into azepane, a seven-membered N-heterocycle, using a reusable Pt/TiO₂ catalyst. The high catalytic performance is attributed to the synergistic roles of TiO₂ and Pt nanoparticles: TiO₂ promotes depolymerization, while Pt nanoparticles activate H₂.

Image reproduced by permission of Tomoo Mizugaki from *Green Chem.*, 2026, **28**, 7280.

Cover background image partly generated with AI.

As featured in:



See Tomoo Mizugaki *et al.*, *Green Chem.*, 2026, **28**, 7280.