

Showcasing research from Dr. Alexis Bordet's laboratory, Max Planck Institute for Chemical Energy Conversion, Mülheim an der Ruhr, Germany.

Photo-induced enhancement of hydrogenation activity for ruthenium nanoparticles immobilized on carbon dots

The present work demonstrates the capability of irradiated carbon dots to act as electron reservoirs for immobilized ruthenium nanoparticles, thereby greatly enhancing their hydrogenation activity. The strong synergistic effects arising from the combination of carbon dots and ruthenium nanoparticles under UV are potentially more broadly accessible with other carbon dots structures, metal nanoparticles compositions, and chemical transformations.

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