

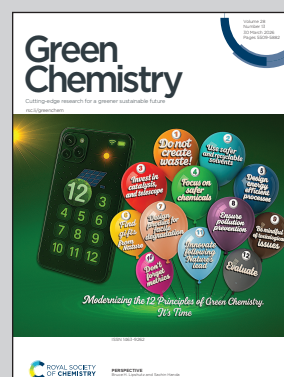
Showcasing research from Professor Zhan and Han's laboratory, School of Pharmacy, Chengdu University of Traditional Chinese Medicine, Sichuan, China.

Water-promoted deconstructive amination of alkenes through single-carbon deletion: access to fully substituted pyrroles

This study reports a water-promoted, catalyst-free deconstructive amination of electron-deficient dienes that converts alkenes into fully substituted pyrroles through a single-carbon deletion pathway. The reaction proceeds under mild conditions without oxidants, radical precursors, or photochemical activation. Mechanistic studies reveal a water-assisted sequence involving aziridination and selective bond cleavage, enabling efficient skeletal remodeling of C=C bonds. The method complements existing deconstructive nitrogenation strategies and provides a practical, sustainable route to valuable pyrrole scaffolds and their bioactive analogs.

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See Bo Han, Gu Zhan *et al.*, *Green Chem.*, 2026, **28**, 5633.