

Showcasing research by Wei Ding, Professors Shenxu Bao, and Yimin Zhang *et al.* from the University of Wuhan University of Technology, Wuhan, China.

Stepwise recycling of valuable metals from spent lithium-ion batteries based on *in situ* thermal reduction and ultrasonic-assisted water leaching

A breakthrough method is proposed for stepwise recovering valuable metals from spent entire lithium-ion batteries. *In-situ* thermal reduction combined with ultrasonic-assisted water leaching can efficiently and selectively recover lithium. The developed method demonstrates flexibility in recovering spent LIBs as it is performed on mixed electrode materials that are not pre-sorting, representing the reality of industrial recycling facilities.



