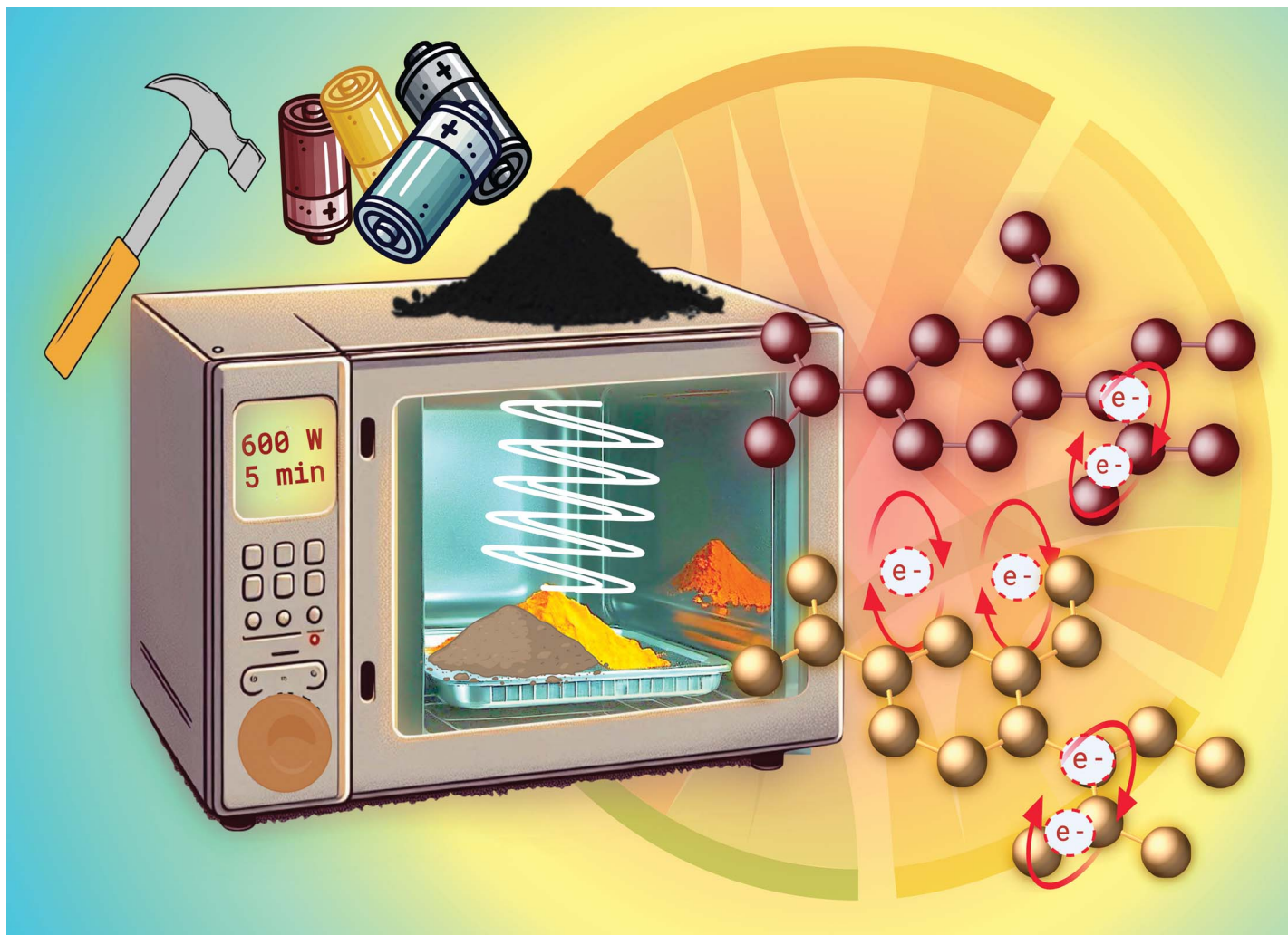




Showcasing research from Professor Elza Bontempi's team, Chemistry for Technologies Laboratory, University of Brescia, Brescia, Italy. Image created with BioRender.com.

Thermal approaches based on microwaves to recover lithium from spent lithium-ion batteries

Recovery process from spent lithium-ion batteries (LIBs) based on microwave-assisted reactions. The black mass contains both cathodic and anodic materials, with an important amount of graphite. The figure highlights the efficiency of microwave heating, which induces rapid black mass heating, allowing for the recovery of valuable metals (such as lithium) due to carbothermic reductions. This process reduces the need for energy-intensive pre-treatments and simplifies the overall recycling procedure, making it more efficient and sustainable.

As featured in:



See E. Bontempi *et al.*,
RSC. Sustainability., 2024, **2**, 2505.