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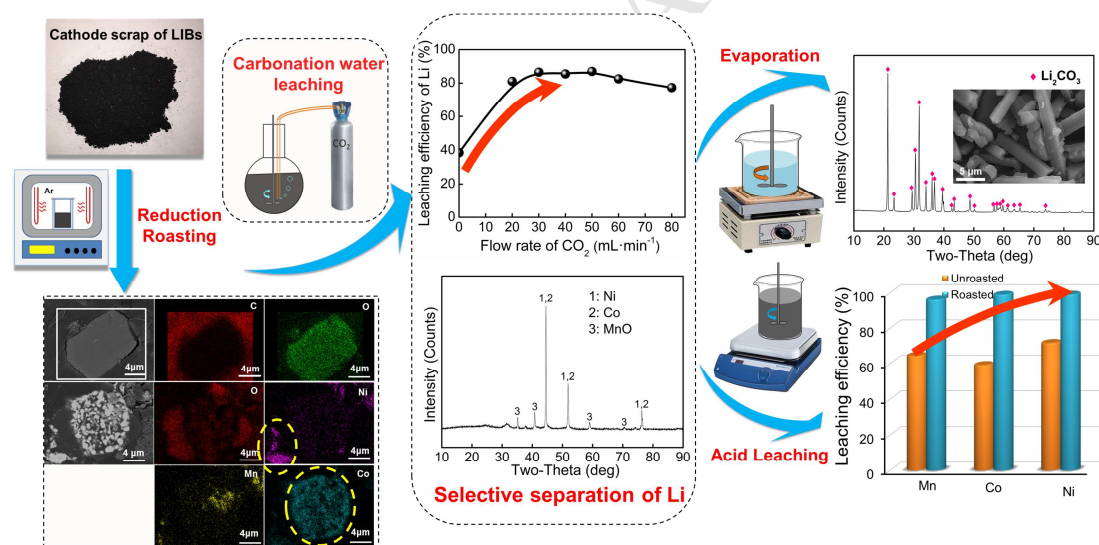
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Graphical abstract



ABSTRACT

A combined process was presented to recover valuable metals from lithium nickel cobalt manganese (NCM) cathodes of spent lithium-ion batteries. In this process, the cathode scrap was first roasted with carbonaceous reductant, and then carbonation water leaching was employed to selectively extract Li from the roasted

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