

Supporting Information

Biological Leaching and Chemical Precipitation Methods for Recovery of Co and Li from Spent Lithium-Ion Batteries

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Table S1: Removal efficiency of Cobalt and Lithium from spent LIB in fungal, bacterial and chemical leaching methods

Metal	Metal removal efficiency (%) ^a									
	<i>A. niger</i> MM1			<i>A. niger</i> SG1		<i>A. thiooxidans</i> 80191			Chemical ^b	
	Abiotic	Type 1	Type 2	Type 1	Type 2	Abiotic	Type 1	Type 2	Citric acid	Sulfuric acid
Cobalt	8±3	67±3	82±3	67±2	80±3	1±0.2	3±0.1	23±0.1	67±2	18±3
Lithium	25±1	81±10	100±2	86±0.4	100±3	23±0.6	23±0.5	66±2	96±8	59±7

^aMetal removal efficiency was calculated by comparing with the values obtained from inorganic acid leaching: Cobalt (Co) = 159.6 mg/g spent LIB powder, and Lithium (Li) = 20.7 mg/g spent LIB powder. ^bChemical: Citric acid = 102.4 mM, and Sulfuric acid = 10.2 mM.