

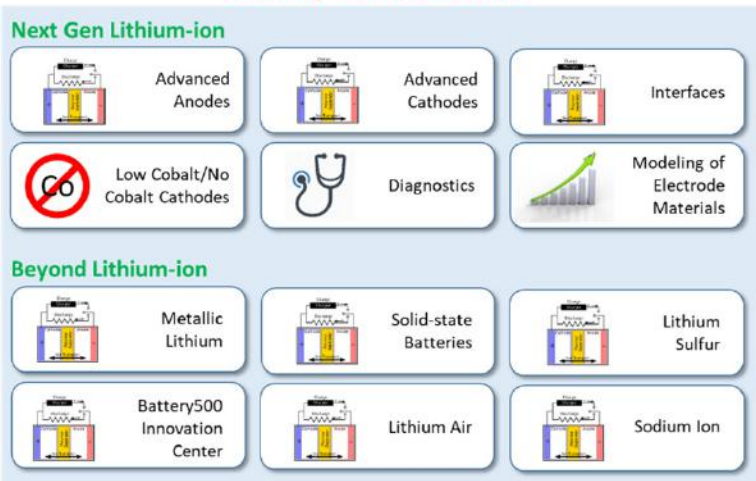
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### Advanced Batteries & Cell R&D



### Battery Materials R&D



Special Focus →



Extreme Fast Charge (XFC)



Low Cobalt/No Cobalt Cathodes

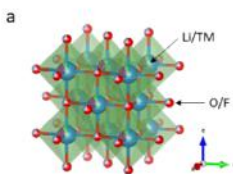


Recycling and Sustainability

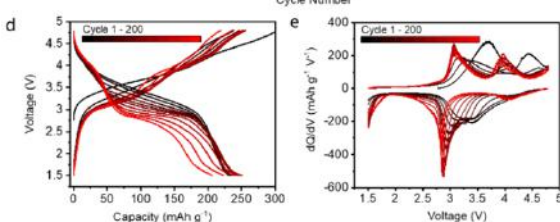
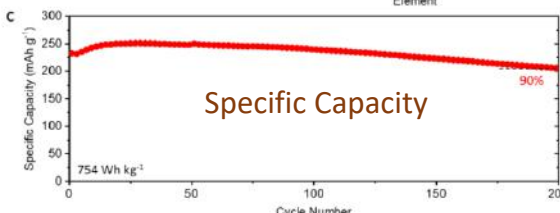
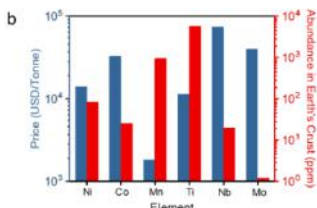
### Sample Recent Highlights

**Battery performance of highly fluorinated DRX,  $\text{Li}_{1.2}\text{Mn}_{0.6}\text{Ti}_{0.2}\text{O}_{1.8}\text{F}_{0.2}$  (Source: LBNL)**

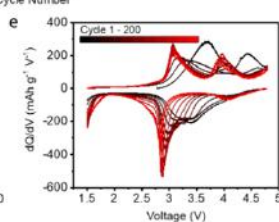
Crystal structure



Price/abundance

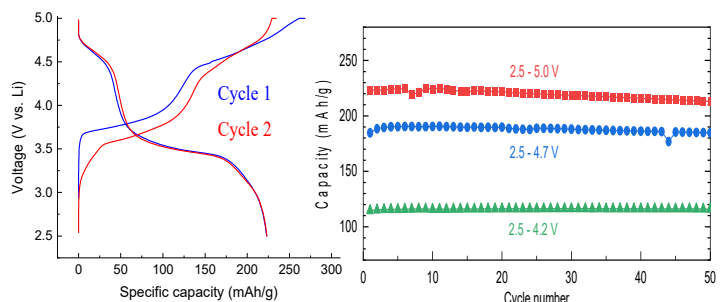


Voltage Profiles

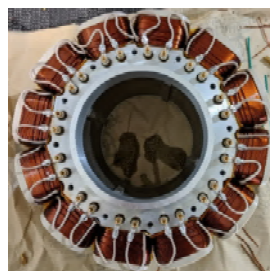


Differential Capacity

**Novel cathode-oxides based on a lithiated spinel framework (Source: ANL)**



**High-performance traction motors without permanent magnets (Illinois Institute of Technology)**



Square WFSM



Overall WFSM rotor with brushes and slip rings mounted on dynamometer