

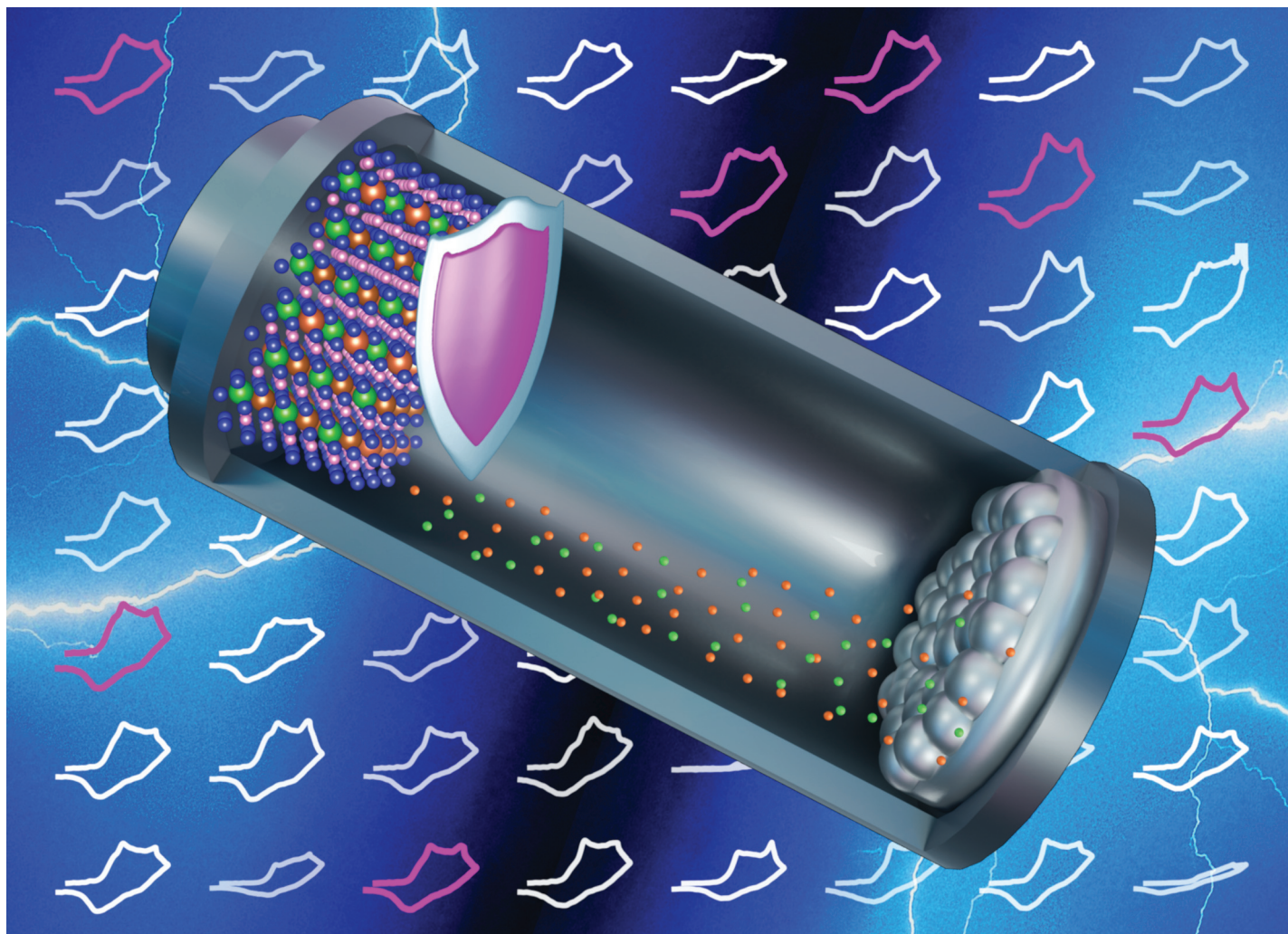
# EES Solar

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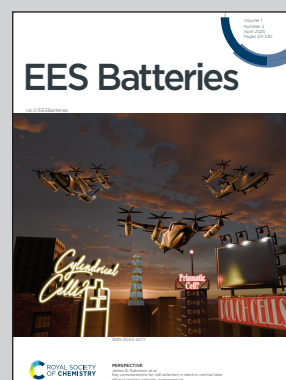
Showcasing research from Professor McCalla's laboratory,  
Department of Chemistry, McGill University, Montreal,  
Canada.

Elucidating the impact of metal doping in  
 $\text{Li}_{1.15}(\text{Ni}_{0.35}\text{Mn}_{0.65})_{0.85}\text{O}_2$  cathodes using high-throughput  
experiments and machine learning

Fully sustainable Li-ion battery cathodes remain elusive as high energy materials continue to rely on some Co and increasing amounts of Ni. Materials that eliminate Co and minimize Ni continue to struggle with poor long-term performance due to processes such as transition metal dissolution. Maxime Blangero, Eric McCalla *et al.* recently tested the impact of 56 different dopants in nearly 200 cathodes to identify optimal materials that act as shields preventing transition metal dissolution and improving long-term performance.

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### As featured in:



See Maxime Blangero, Eric McCalla  
*et al.*, *EES Batteries*, 2025, **1**, 260.