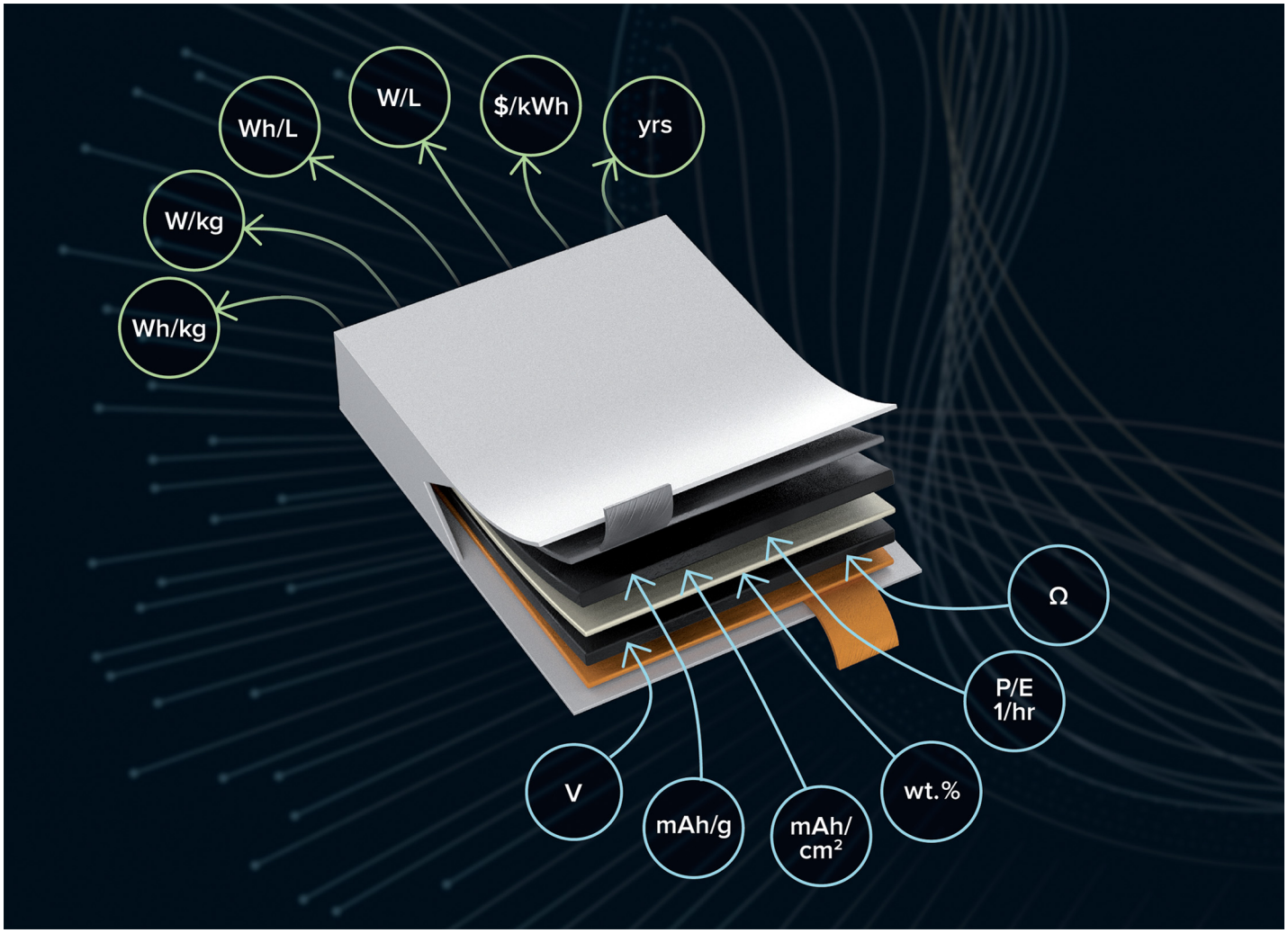

Showcasing research from the Battery Performance and Cost (BatPaC) Modeling Group at Argonne National Laboratory.

From material properties to device metrics: a data-driven guide to battery design

This article provides a data driven perspective on the material parameters, cell design decisions, and manufacturing costs with the greatest impact on battery metrics (*i.e.*, energy, power, cost, lifetime, and safety). Perspectives are supported by Monte Carlo simulations of lithium-ion batteries using the Battery Performance and Cost (BatPaC) model, a freely available tool developed at Argonne National Laboratory. This work highlights the most important parameters for each metric and discusses viable trade-offs when attempting to achieve multiple metrics (*e.g.*, high energy density with long life).

As featured in:

See Kevin W. Knehr *et al.*, *Energy Adv.*, 2023, **2**, 1326.

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