

Showcasing research from Professor Nae-Lih Wu's laboratory, Department of Chemical Engineering, National Taiwan University, Taipei, Taiwan.

A boron-nitride based dispersive composite coating on nickel-rich layered cathodes for enhanced cycle stability and safety

A hexagonal boron-nitride (h-BN) based dispersive composite coating, developed using a rapid low-temperature post-calcination process, has been shown to significantly improve the cycle stability and safety of the Ni-rich layered cathode. This work identifies h-BN as well as the concept of "anion-trapping" as promising strategies for enhancing the cycle life and safety of Ni-rich cathodes and presents an industrially facile method to accomplish such applications.



