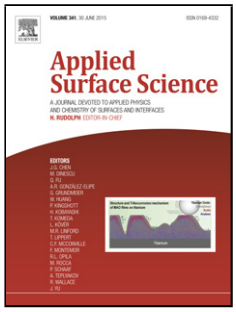

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Surface Element Segregation and Electrical Conductivity of Lithium Layered Transition-metal Oxide Cathode Materials

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Highlights

- Surface element segregation is uncovered for layered transition-metal oxides.
- Ni/Mn atoms enrich in surface region, while Co atoms show anti-segregation.
- TMs segregation can be alleviated with increasing Ni/Mn content.
- With the increasing of Ni/Mn content, bulk activation energy increase.

Abstract

Surface element segregation and electric conductivity are critical in determining lithium storage abilityof given cathode materials, which are poorly understood and not