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spectroscopy Giselle Sandi Chapter 8. The cathode-electrolyte interface in a Li-ion battery Kristina Edstrom, Torbjorn Gustafsson and Josh Thomas; Chapter 9. Theoretical studies on the solvent structure and association properties, and on the Li-ion solvation: implications for SEI layer phenomena Yixuan Wang and Perla B. Balbuena; Index

Sommario/riassunto

This invaluable book focuses on the mechanisms of formation of a solid-electrolyte interphase (SEI) on the electrode surfaces of lithium-ion batteries. The SEI film is due to electro chemical reduction of species present in the electrolyte. It is widely recognized that the presence of the film plays an essential role in the battery performance, and its very nature can determine an extended(or shorter) life for the battery. In spite of the numerous related research efforts, details on the stability of the SEI composition and its influence on the battery capacity are still controversial. This book carefully
