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Nota di contenuto	Introduction -- 1. Characterizing thermal behavior of an air-cooled lithium-ion battery system for HEV applications using FEA approach (2013-01-1520) -- 2. AutoLion: a thermally coupled simulation tool for automotive li-ion batteries (2013-01-1522) -- 3. Simplified extended Kalman filter observer for SOC estimation of commercial power-oriented LFP lithium battery cells (2013-01-1544) -- 4. A complete li-ion battery simulation model (2014-01-1842) -- Comparison of optimization techniques for lithium-ion battery model parameter estimation (2014-01-1851) -- 6. Physics-based models, sensitivity analysis, and optimization of automotive batteries (2014-01-1865) -- 7. Three-dimensional electrochemical analysis of a graphite-LiFePO ₄ li-ion cell to improve its durability (2015-01-1182) -- 8. Experimental measurements of thermal characteristics of LiFePO ₄ battery (2015-01-1189) -- 9. Will your battery survive a world with fast chargers? (2015-01-1196) -- About the editor.
Sommario/riassunto	This collection of nine papers presents the modeling and simulation of batteries and the continuing contribution being made to this impressive progress, including topics that cover: Thermal behavior and characteristics, Battery management system design and analysis, Moderately high-fidelity 3D capabilities, Optimization Techniques and

Durability.
