Combustion-synthesized LiMn-based spinel nanostructures as cathode materials for lithium-ion batteries

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Research Highlights

- ✓ Combustion-synthesized Li-Mn spinel-based cathode nanostructures
- ✓ Nanorods resulted in better electrochemical behavior vs. bulk commercial spinels
- ✓ Doping with Cu and Al ions further improved the insertion/extraction process of Li
- ✓ Exceptional stability obtained at high rates
- ✓ $Li_{1.068}Al_{0.099}Mn_{1.901}O_4$ nanostructure showed the highest electrochemical reversibility