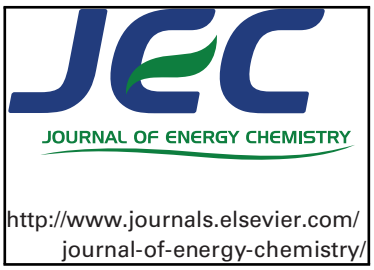

Direct synthesis of La-Mg-Ni-Co type hydrogen storage alloys from oxide mixtures

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Highlights

- A_2B_7 type La-Mg-Ni-Co alloys were synthesized in molten salt at 750°C.
- $LaNiO_3$ and $Mg_{0.4}Ni_{0.6}O$ phases facilitated the La-Ni and Mg-Ni phase formations.
- Increase in Mg content caused formation of $La_{1.5}Mg_{0.5}Ni_7$ phase in the alloy structure.
- Synthesized porous alloys had capacities up to 379 mA h g^{-1}.