

Synthesis of Magnesium Aluminum Spinel from Carbonate Hydroxyde Precursors

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Abstract—Three ways to synthesize MgAl_2O_4 precursor were studied with use of a two-step precipitation at the beginning of ions Mg^{2+} and then Al^{3+} with ammonium hydroxide, ammonium carbonate, and mixture thereof. Efficiency of these ways was evaluated with the aid of a residual amount of cations Mg^{2+} and Al^{3+} in the mother liquor.

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