



Magnetic behavior of Mg–Al–Zn–Fe mixed oxides from precursors layered double hydroxide

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abstract

Mixed oxides of Mg–Al–Zn–Fe were obtained by calcination of layered double hydroxides (LDH) prepared by coprecipitation reaction with hydrothermal treatment. The structural characterization of precursors and oxides was carried out by X rays diffraction, showing increases of ZnO phase with the increase of the zinc content. Magnetic behavior was studied by vibrating sample magnetometer (VSM) and by a superconducting quantum interference device (SQUID) showing both paramagnetic and super paramagnetic behavior depending on both particles size and composition.

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