

S.Dubois, J.Fedotova, J.Nechaj, V.Gauthier-Brunet, F.Jay, S.Kavaliova, E.Mosunov, A.Akimov. Mossbauer characterization of as-prepared and oxidized Al-coated and Al<sub>2</sub>O<sub>3</sub>-coated iron particles // Proc. Int. Conf. "Mossbauer spectroscopy in materials science" (June 16-20, 2008, Hlohovec, Czech Republic) AIP Conference proceedings.-2008.- V. 1070.- p. 77-83.

Present research is focused on tracing the oxidation of Al-coated and Al<sub>2</sub>O<sub>3</sub>-coated Fe powders with respect to their initial microstructure. The Mechanofusion process (MF) and the Fluidized-Bed Metal Organic Chemical Vapour Deposition (FB-MOCVD) techniques have been used to coat Fe particles respectively with Al<sub>2</sub>O<sub>3</sub> and Al shell, respectively. Characterization of the as-prepared and oxidized materials was performed by RT Mössbauer spectroscopy, XRD and SEM. Mössbauer spectroscopy shows quite pronounced differences both in the initial structure of Al-coated and Al<sub>2</sub>O<sub>3</sub>-coated Fe particles and also after their oxidation.

[Назад к списку публикаций](#)