

TECHNOLOGICALLY-MODIFIED $\text{Cu}_{0.1}\text{Ni}_{0.8}\text{Co}_{0.2}\text{Mn}_{1.9}\text{O}_4$ CERAMIC: POSITRON ANNIHILATION LIFETIME SPECTROSCOPY AND DEGRADATION STUDIES

The $\text{Cu}_{0.1}\text{Ni}_{0.8}\text{Co}_{0.2}\text{Mn}_{1.9}\text{O}_4$ ceramics modified by NiO phase were investigated. It is established that the amount of additional NiO phase in these ceramics extracted during sintering play a decisive role. This effect is well revealed only in ceramics having a character fine-grain microstructure, while the monolithization of ceramics caused by great amount of transferred thermal energy reveals an opposite influence. The process of monolithization from the position of evolution of grain-pore structure was studied in these ceramics using positron annihilation lifetime spectroscopy.

Primary author: KLYM, Halyna (Lviv Polytechnic National University)

Co-authors: Dr KOSTIV, Yuriy; Dr VASYLCHYSHYN, Ivanna

Presenter: KLYM, Halyna (Lviv Polytechnic National University)

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