

## **Obtaining of Nanocrystalline Ferrites and Other Complex Oxides by Sol-Gel Method with Participation of Auto-Combustion**

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**Abstract :** It is well known that in recent years magnetic materials have received increased attention due to their properties. For this reason a significant number of patents that were published during the last decade are oriented towards synthesis and study of such materials. The aim of this work is to create and study ferrite nanocrystalline materials with spinel structure, using sol-gel technology with participation of auto-combustion. This method is perspective in that it is a cheap and low-temperature technique that allows for the fine control on the product's chemical composition.

**Keywords :** magnetic materials, ferrites, sol-gel technology, nanocrystalline powders

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