عنوان مقاله:

STUDY OF THE OPTIMUM CALCINATION TEMPERATURE FOR THE SYNTHESIS OF STRONTIUM HEXAFERRITE MAGNETIC CERAMIC NANOPOWDER BY A SOL-GEL AUTO-COMBUSTION METHOD IN THE PRESENCE OF CATIONIC SURFACTANT

محل انتشار:

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خلاصه مقاله:

In this research the sol-gel auto-combustion method was used to prepare strontium hexaferrite nanopowder. A solution of distilled water, ferric and strontium nitrates, citric acid, trimethylamine, and n-decyltrimethylammonium bromide cationic surfactant, was heated to form a viscous gel. The gel was heated and then ignited automatically. As-burnt powder was calcined at temperatures from ۷۰۰ to ۹۰۰?C in air to obtain SrO.۶Fe۲O۳ phase. The influence of the calcination temperature on the phase composition of the products has been investigated. X-ray diffraction confirmed .the formation of single-phase strontium hexaferrite nanopowder at temperature of ۸۰۰?C

کلمات کلیدی:

Sol, gel auto, combustion, Strontium hexaferrite nanopowder, Cationic surfactant

لینک ثابت مقاله در پایگاه سیویلیکا: