

## عنوان مقاله:

Preparation of Chrom nitride CrN and Cr<sub>2</sub>N in N<sub>2</sub> Atmosphere. Thermal investigation of Cr Ceramic

## محل انتشار:

سیزدهمین کنگره سرامیک ایران و سومین کنفرانس بین المللی سرامیک ایران (سال: 1401)

تعداد صفحات اصل مقاله: 5

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## خلاصه مقاله:

In this work is presented a new method for the preparation of chrom nitride CrN and Cr<sub>2</sub>N. The thermal behavior of chromium Cr was investigated using two different techniques of thermogravimetry and differential scanning calorimetry under N<sub>2</sub> gas atmosphere from ۲۵ to ۱۶۰۰°C to produce new Cr ceramic. The identity of products at different stages was confirmed using the XRD technique. Both techniques produced results supporting the stages for the production of different compounds. The received products were investigated by SEM electron microscopy. The form and size of crystals produced were investigated. The distinct energy changes were observed, namely the endothermic changes in DSC. The experiments confirmed the process of ۳Cr + N<sub>2</sub> & U<sub>2</sub>N + CrN. In this work was shown a method for preparation of Chrom nitride particles

## کلمات کلیدی:

Chromium nitride, TGA

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1557028>

