Poster Presentation

Effect of temperature on synthesis of chromium oxide

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Our synthesis of Chromium oxide nanoparticle involves hydrothermal method using Chromium anhydride and anhydrous alcohol as the raw materials.Variation of temperature in particle size of nanoparticle is observed by increasing and decreasing the temperature.Various characterization method including XRD,TEM and SEM were used for characterizing the synthesised product.It was found that with increase in temperature good particle size of Chromium oxide is formed.As the process is simple and easy it can be used in various applications such as catalysis,colorants any many more.

U.Balachandran.(1995).Nanostruct.Mater.5.505

N.Arul Dhas.(1997).Chem.Mater.9.3159

D.Vollath.(1996).Mater.Lett.29.271

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