

عنوان مقاله:

Using Taguchi Experimental Design Method for Obtaining Suitable Thickness in Decorative Chromium Electroplating

محل انتشار:

مجله شیمی فیزیکی و الکتروشیمی، دوره 5، شماره 1 (سال: 1396)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Aiyoub Parchehbaf Jadid - Department of Chemistry, Ardabil Branch, Islamic Azad University, Ardabil, Iran

Mostafa Pourjafar - Department of Chemistry, Payame Noor University, Tehran, Iran

خلاصه مقاله:

In this study, Taguchi experimental design has been used for the optimization of thickness of chromium layers. For this purpose brass materials have been electroplated under various conditions of the process. An orthogonal array (OA) was employed to analyze the effect of plating parameters on the characteristic of the thickness. Variables which were considered for working were as following; amount of chromic acid, amount of sulfuric acid, time, and current density. Eventually, the obtained results revealed that among the influential parameters in the process, only current density of $6A/dm^2$ and time of 4 minutes have the most effect on the enhancement of the thickness

کلمات کلیدی:

Thickness, Electroplating, Decorative Chromium, Taguchi Method, Experimental Design

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1907667>

