

## عنوان مقاله:

NIR reflective nanopigments based on CoCr<sub>2</sub>O<sub>4</sub> Suitable for Automotive Cool Coatings: Investigation of Citric Acid to Cation Molar Ratio and pH Value

## محل انتشار:

چهارمین کنگره بین المللی پوشش های حمل و نقل (سال: 1393)

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## خلاصه مقاله:

Pigments based on CoCr<sub>2</sub>O<sub>4</sub> spinel structure have been prepared via Pechini-type sol-gel method. The molar ratio of citric acid to cations and pH value have been evaluated. The developed nano-crystalline powders were characterized by X-ray diffraction (XRD), UV-Vis-NIR diffuse reflectance spectroscopy and CIE-L\*a\*b\* 1976 color scales. The results show that the reflectance behaviour enhances with increasing CA/M molar ratio and decreasing pH value. These facts express potential of the pigments to be employed in automotive cool coatings.

## کلمات کلیدی:

NIR reflective pigment, Pechini-type sol-gel, Cool coating, UV-vis-NIR spectrophotometry

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/336301>

