

## عنوان مقاله:

Application of smart camera phone for End point detection of precipitation titration technique

## محل انتشار:

بیستمین کنگره شیمی ایران (سال: 1397)

تعداد صفحات اصل مقاله: 1

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## خلاصه مقاله:

Solution scanometry, a new, simple, fast and inexpensive method, was applied for the determination of the accurate detection of precipitation titration end points without using any indicator[1]. In this work we used mobile for detection of end points of the titration of sulfate by barium. The photo of cell containing precipitate was taken with a smartphone, and the image was analyzed in the CMYK and RGB color mode by a photoshop program[2]. The results revealed that among the color values, the magenta value was suitable for the accurate detection of end points. To improve the accuracy of the end point detection, second derivative titration curves were obtained. The titration errors were acceptable, and were always less than 10%. The performance of our smart-phone method was also tested with water samples including city tap water, Lake and mineral water and satisfactory result was gained.

## کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/851331>

