

عنوان مقاله:

Direct determination of ethanol based on fluorescence quenching of TGA-capped CdS quantum dots

محل انتشار:

سومین همایش ملی کاربردهای شیمی در فناوریهای نوین (سال: 1392)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

In this paper we report a simple and very sensitive method for determination of trace amounts of ethanol indrinks based on fluorescence quenching of TGA-capped CdS quantum dots .the quenching mechanismwas attributed to the non-radiative recombination due to the esterification reaction that occurs betweenethanol and carboxylic group of TGA. Under optimum conditions a wide linear dynamic rang was obtainedbetween $92 \times 10^6 - 9.2 \times 10^{-2}$ ng/L. The proposed method manifested several advantages such as highsensitivity, short analysis time, low cost and ease of .operation

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

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