

عنوان مقاله:

Pre-concentration and Determination of Fluoxetine in Hospital Wastewater and Human Hair Samples using Solid-phase μ -Extraction by Silver Nanoparticles Followed by Spectro-fluorimetric

محل انتشار:

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نویسندگان:

Sara Sahebhasagh - *Department of Chemistry, Mashhad Branch, Islamic Azad University, Mashhad, Iran*

Javd Fadaee Kakhki - *Technology Management Department, Police Sciences and Social Studies Institute, Tehran, Iran*

Mahmoud Ebrahimi - *Department of Chemistry, Mashhad Branch, Islamic Azad University, Mashhad, Iran*

Mohammad Reza Bozorgmehr - *Department of Chemistry, Mashhad Branch, Islamic Azad University, Mashhad, Iran*

Mohamad Reza Abedi - *Department of Applied Chemistry, Quchan Branch, Islamic Azad University, Quchan, Iran*

خلاصه مقاله:

Fluoxetine (N-methyl-c-[F-phenoxy] benzene epropanamine) (FLU), the main drug in the antidepressant class is serotonin reuptake inhibitor (SSRI), which has emerged as a therapeutic advancement in psychiatry. It has been shown to be effective in treating depression worldwide and has also been shown to be much more effective in treating other syndromes, such as bulimia nervosa, panic attacks, and obsessive-compulsive disorder. An instrumental setting including off-line solid phase microextraction with spectrophotometry has been developed to improve the sensitivity of fluoxetine quantification in real samples. This method was used to analysis wastewater specimens with 89.9% recovery. This research is a review of new developments in substances and format technology that lead to the extraction of semi-polar compounds in various extraction methods. This mainly consists of a solid phase μ -extraction, using a simple silver nanoparticle. The use of μ -extraction conditions such as pH, salt effect, yield and desorption conditions are examined. This procedure has a high enrichment factor and excellent sample selection cleaning. Reasonable relative improvement was also obtained. Linear calibration curves were obtained in the range of 0.1-35 mg L⁻¹. We have used this method to clean up and pre-concentration of fluoxetine from factual samples

کلمات کلیدی:

fluoxetine, Silver nanoparticles, Solid-phase micro-extraction, FLU

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