

Abstract

As technology is advancing day by day, social changes happen which affects us globally. Drugs are also on the path of evolution. Today's generation is mostly linked with high ambition and a luxury lifestyle, leads them towards drug abuse. High quality life style exert pressure on people which make them away from reality. Drug abusing is becoming more widely use in students. Various factors cause drug addiction that need to be highlighted. Drugs causes impairment of brain and body as well. Prevalence of drug abuses increasing day by day according to different reports all over the world. Drugs detect in past by different analytical techniques including different spectroscopic, chromatographic and immunoassays. These techniques have various problems like expensive, time consuming and required expertise. The biological test also performs for drug detection by blood, saliva, hair and urine. Biological tests perform within a certain time period. Color tests is rapid and low-cost method of drugs detection but sometimes gives false positive results. As nanotechnology advances in various fields of science, different types of sensors made for many purposes. Nano materials are highly specific, sensitive and selective which make them unique as sensors. In this study, tin doped iron oxide synthesized and characterized by SEM, FT-IR, UV-visible spectroscopy and Photoluminescence which explains their properties, behavior and sensing efficiency. Nanoparticles detection is best and rapid method for drug sensing and need to produce biosensing chips, nano sheets for detection.