

## عنوان مقاله:

Effects of Dopant and Biological Part on Optical Properties of Zinc Sulfide Nanocrystal

## محل انتشار:

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## خلاصه مقاله:

In this work was investigated effect of magnesium doped amount on phosphorescent characteristic of ZnSsemi-conductor nano-particles. ZnS:Mn nano-particles are synthesized from quaternary W/O microemulsion system. It is observed with increase Mn percent in ZnS:Mn nanoparticles, emission intensity changed and by using 5.5 % magnesium for total Zn(+2), maximum emission were achieved. Also, we observed addition of biotin and subsequent specific binding events alter the dielectric environment of the nanoparticle, resulting in a spectral shift of the particle plasmon resonance. Avidin concentration detection followed by variety of emission intensity. It is observed with reducing particle size emission shifted to the lower wave lengths. In addition with conjugation between Avidin and Biotin by Mercaptoethanol in biologic media spectral emission deduced. For quality and quantity analyses of this product Scanning Electron Microscopy (SEM), Transmission Electron Microscopy (TEM), Energy Dispersive X-ray Spectroscopy (EDS), Inductive Coupled Plasma (ICP), X- ray Diffraction (XRD) and spectrograph techniques are .used

## کلمات کلیدی:

nanocrystal, zinc sulfide, biological part, dopant, avidin, biotin

## لینک ثابت مقاله در پایگاه سیویلیکا:

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