

عنوان مقاله:

Effect of Laser Fluence on the Formation of Cu Nanoparticles Synthesized by Laser Ablation in Organic Solvent

محل انتشار:

همایش ملی فناوری های نوین در نانو کامپوزیت ها (سال: 1395)

تعداد صفحات اصل مقاله: 6

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خلاصه مقاله:

Copper nanoparticles (Cu NPs) were synthesized using laser ablation from Nd:YAG laser with a wavelength of 1064 nm in ethylene glycol. The physical properties of NPs were studied as a function of the laser fluence. The diameters of produced NPs were measured directly by electron microscopy. With increasing laser fluence, the mean size of NPs was found to increase up to 14 nm. UV-visible spectroscopy was used to consider the optical property of the obtained suspension, representing a strong peak at about 584 nm. Furthermore, Fourier transform infrared spectroscopy was used to verify information about the NPs surface state

کلمات کلیدی:

Copper NPs, laser ablation, laser fluence, ethylene glycol

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