

Band-pass filter behaviour of metal nanocomposites

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Abstract: From ancient time to modern era noble metal nanoparticles have been getting priority in the fabrication of optical filters. The reason behind this is the wide variation in the surface plasmon resonance wavelength with shape and size of such nanoparticles. The present paper reports synthesis and characterization of prism, rod and spherical shaped silver nanoparticles embedded in thin glass slide. Band pass filter characteristics of the as synthesized nanocomposites are observed. Attempts are being made to make pass band narrower for possible applications in the domain of visible light communication. Details of findings will be presented in the conference.

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