

Supporting Information

Fabrication of a Flexible Ultraviolet Band-Pass Filter using Surface Plasmon Metal-Polymer Nanocomposite Films for Promising Laser Applications

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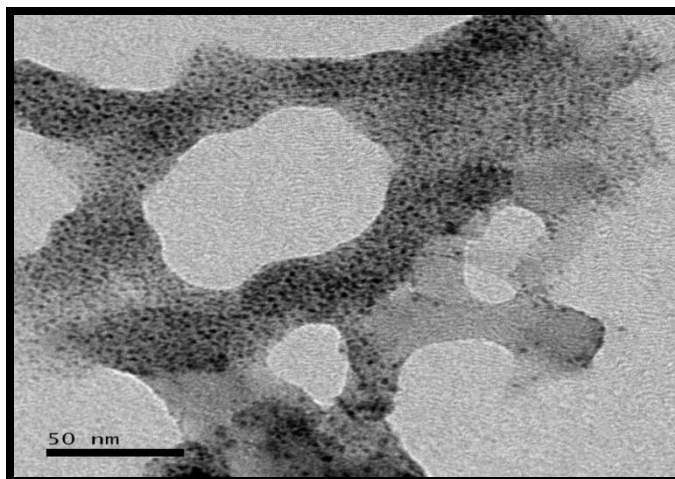


Figure S1. Low resolution TEM (transmission electron microscopy) micrograph exhibits the distributions of Ag nanoparticles (as dark metal contrast shining) in 5 wt% Ag/PC NC film.

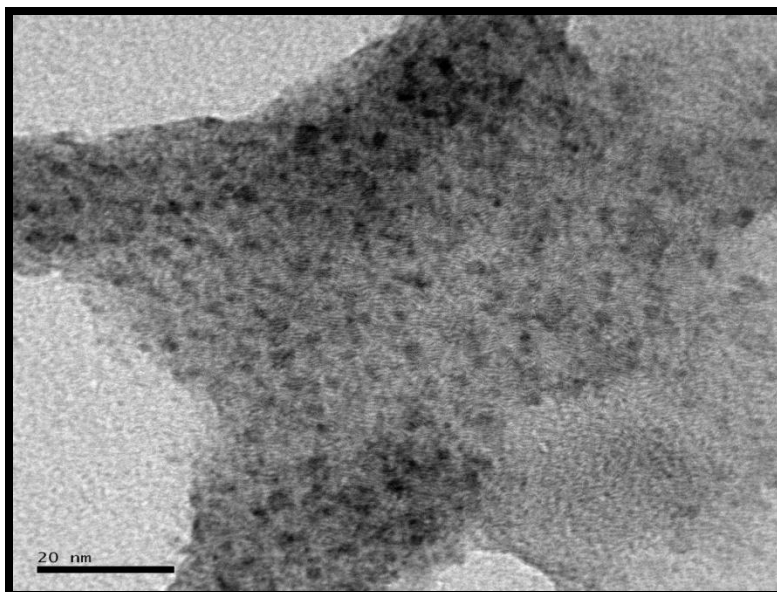


Figure S2. Shows the magnified view of Figure S1, the TEM micrograph exhibits the distributions of Ag nanoparticles in 5 wt% Ag/PC NC film.

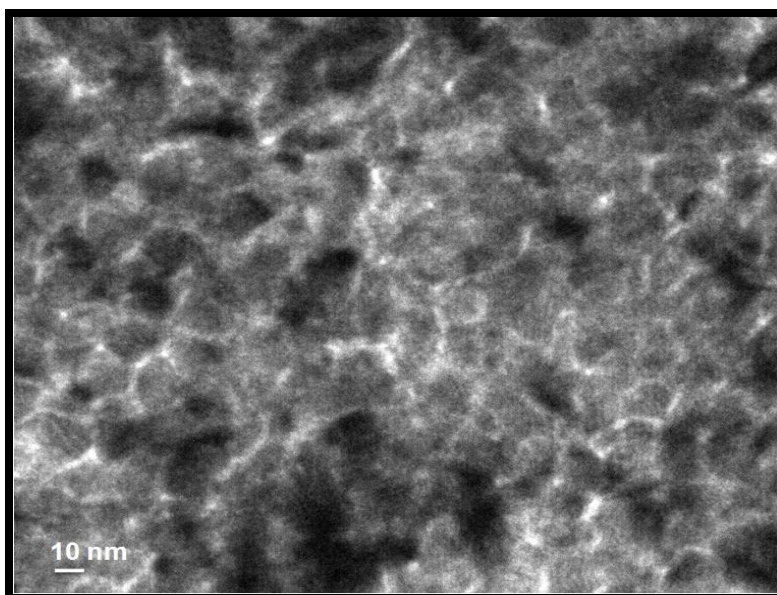


Figure S3. Typical HRTEM (high-resolution TEM) micrograph exhibits the distributions of Ag nanoparticles in 5 wt% Ag/PC NC film.

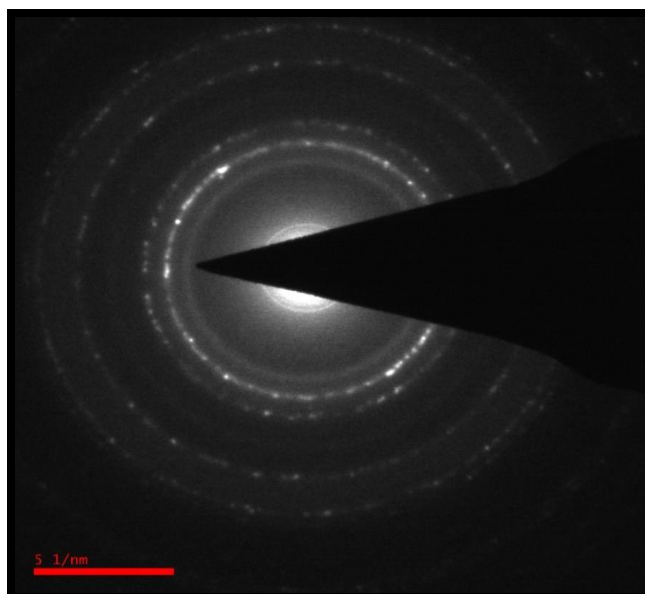


Figure S4. SAED pattern of 5 wt% Ag/PC NC film, it can be clearly see the evidence of Ag nanoparticles signatures in terms of sharp spot on diffraction rings.

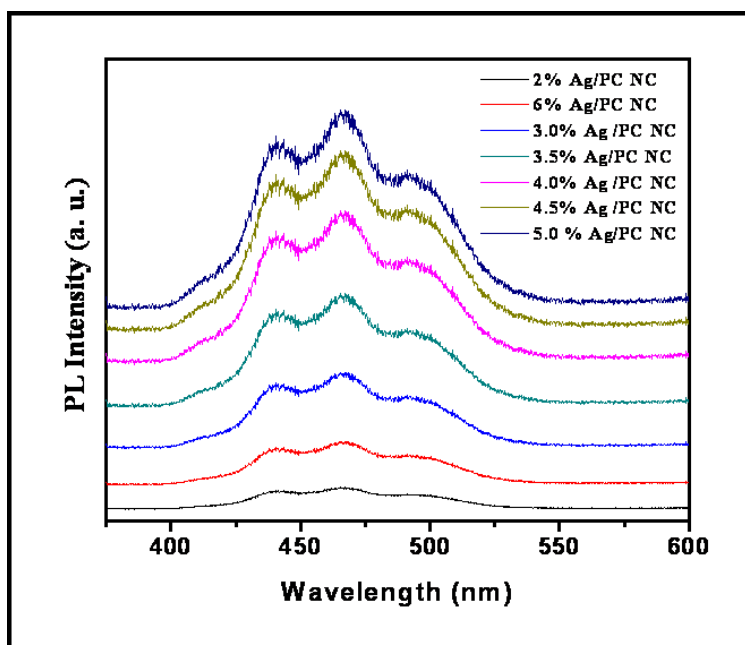


Figure S5. Photoluminescence spectra at excitation wavelength of 375 nm for different wt% of Ag in Ag/PC NC films.

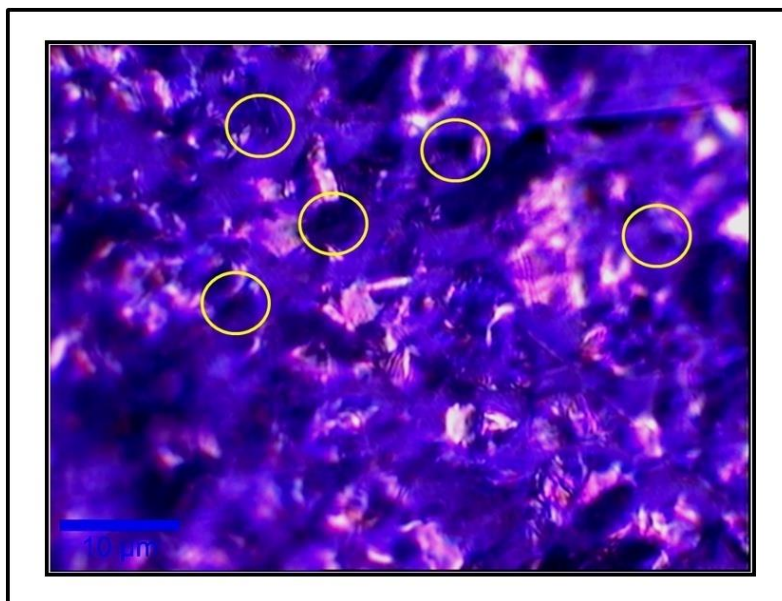


Figure S6. Optical micrograph image of 5 wt% Ag/PC NC film was taken using confocal_PL mapping instrument.

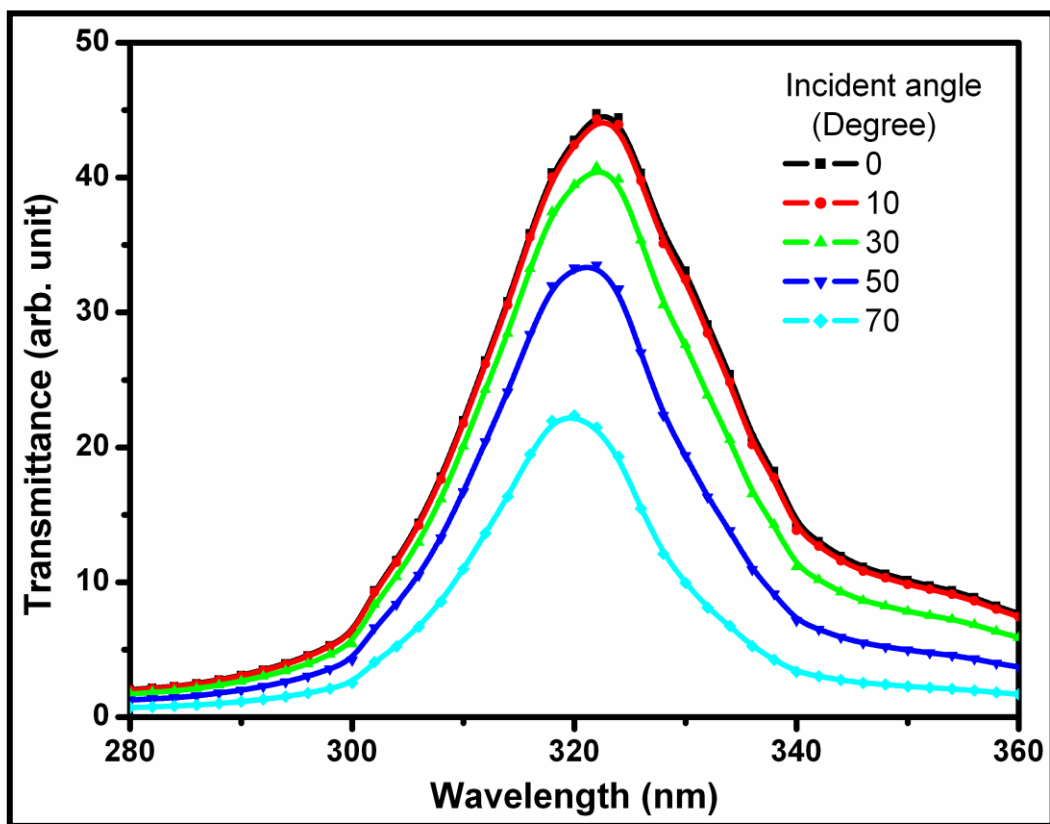


Figure S7: Transmittance spectra of 3 wt% Ag/PC NC film for different angle of incidence.

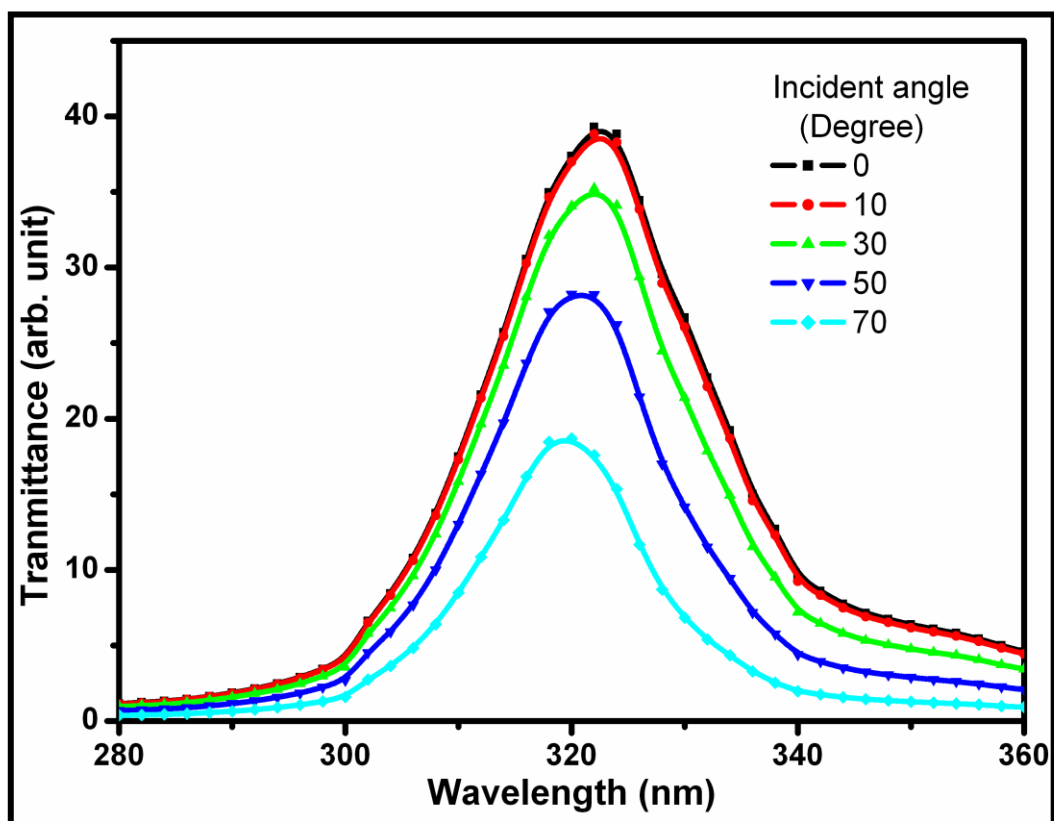


Figure S8: Transmittance spectra of 3.5 wt% Ag/PC NC film for different angle of incidence.

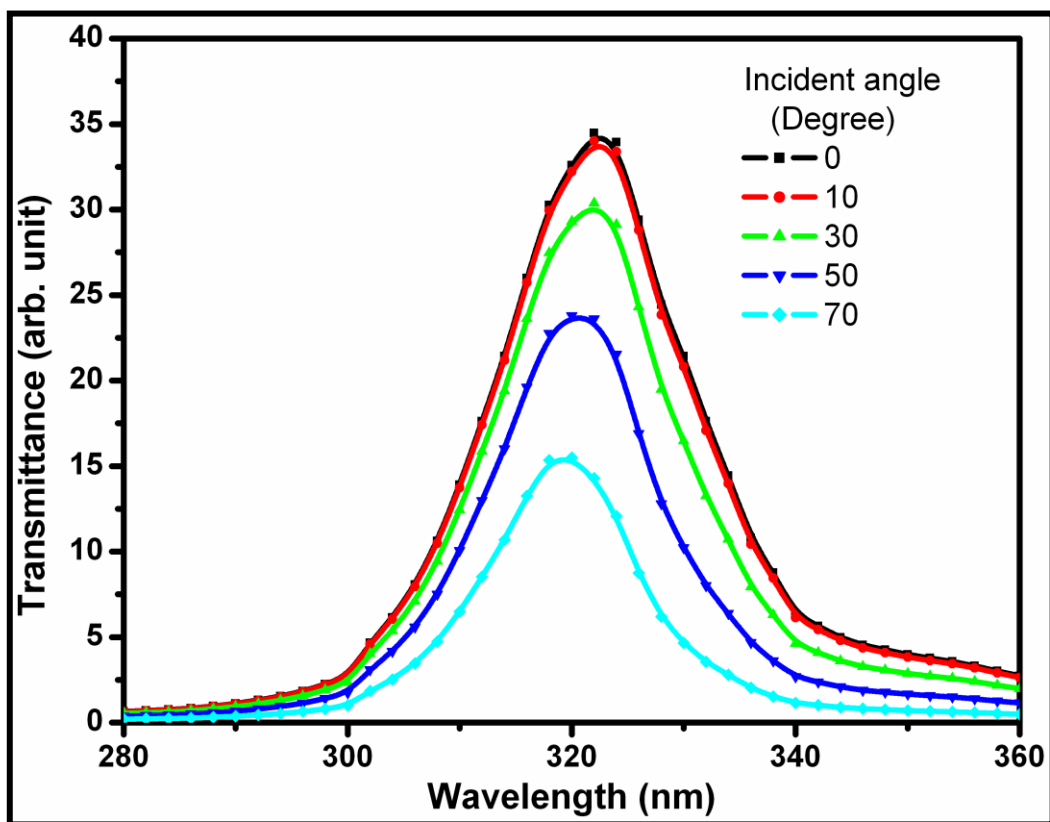


Figure S9: Transmittance spectra of 4 wt% Ag/PC NC film for different angle of incidence.

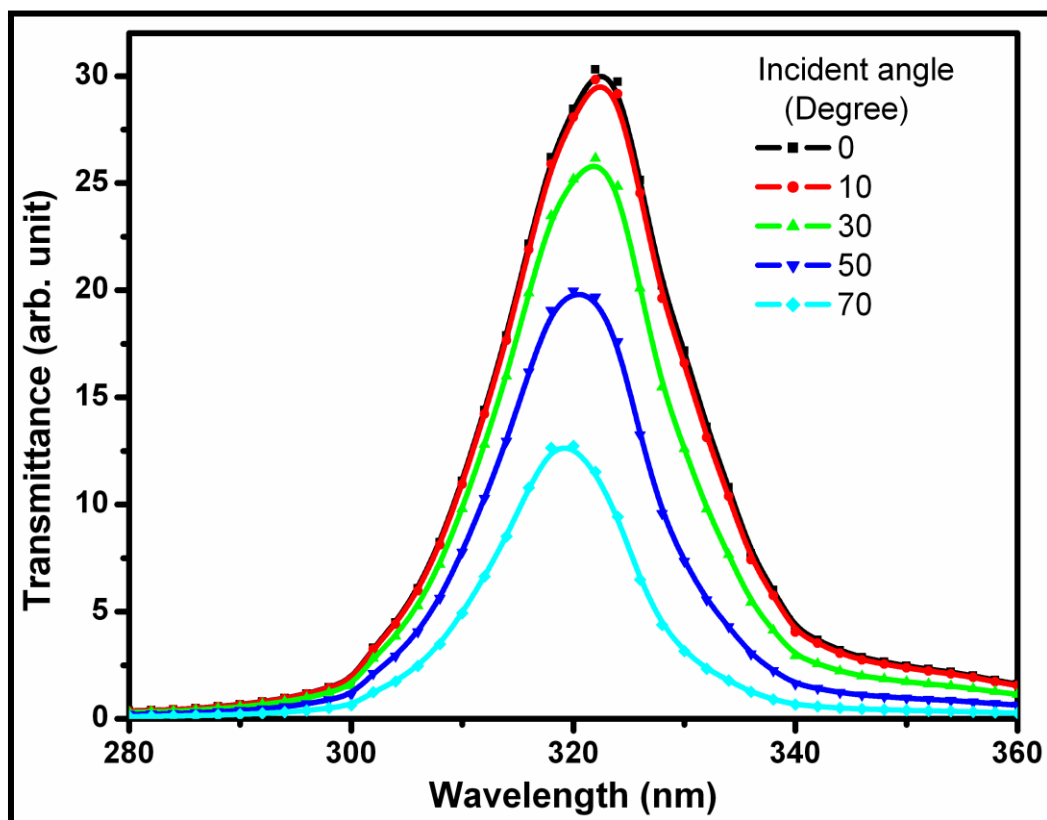


Figure S10: Transmittance spectra of 4.5 wt% Ag/PC NC film for different angle of incidence.