Abstract Submitted
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Metal Nanoparticle Enhanced Fluorescence – Role of Particle Plasmon Resonance[1] SHY-HAUH GUO, University of Maryland, TIM CORRIGAN, University of Maryland, HENRYK SZMACINSKI, Microcosm, Inc, RAY PHANEUF, University of Maryland — We report on a systematic investigation of the enhancement of fluorescence by proximity to Ag nanoparticles whose size, shape and spacing are varied systematically using electron beam lithography. Our measurements indicate that enhancement of both absorption and radiative decay takes place. We compare our observations with expectactions based upon coupling to particle plasmons.

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