

Internal Webinar

Metal Nanostructure Induced Modifications of Light Emitter Relaxation Rates

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Excitation and emission properties of emitters can be modified by coupling them with metal nanostructures. In this talk, I will discuss the net effects of competing radiative and non-radiative processes caused by the metal nanostructures in proximity of emitters with special emphasis on metal-insulator-metal nanogaps. Detailed analysis of these effects across a wide parameter space would enable optimization of energy as well as cost efficient luminescent solar concentrators and photovoltaic and photocatalytic devices. Later, I will present a novel technique based on spectral interferometry to detect the type and extent inhomogeneity in solutions and colloids.

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9:30 AM