We have to take off on Friday, March 17.

Abstract Submitted for the MAR17 Meeting of The American Physical Society

Effect of surface plasmonic resonance on energy transfer in inorganic/organic hybrid thin film NOBUKO ARAI, RYOKO SHIMADA, Japan Women's University — Forster Resonance Energy Transfer (FRET) occurs between a donor and an accepter. In addition, a metal (for example, silver) could enhance this energy transfer due to the surface plasmon effect. This study focuses on hybrid, thin films consisting of layers of zinc oxide (ZnO), silver (Ag), and a polymeric matrix (polymethyl methacrylate) containing anthracene stacked in this order. The ZnO/Ag/anthracene-PMMA hybrid showed the PL intensity larger than that from the ZnO/anthracene-PMMA, possibly due to the surface plasmon effect in the former. Moreover, the blue-shifts was observed for the emission peaks in the Ag plasmonic absorption energy. Detailed results will be presented on site.

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