



School of Nano Science



IPM Condensed Matter &
Statistical Physics Group

Weekly Seminar

Plasmonic (Linear/Nonlinear) - Biomedical Applications

Invited Speaker:

Dr. Pezhman Sasanpour

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School of Nano Science, IPM

Abstract:

Localized Surface Plasmon Resonance (LSPR) in metallic nanostructures has found lots of different applications over the last decade; integrated optic, energy, material characterization, imaging and medicine. The sensitivity of the SPR to the localized and dynamic characteristics of surrounding makes them a bright candidate as a sensing element for label free characterizations in single molecule level. The resulted enhancement of electric field in SPR can be exploited not only in linear applications, but in nonlinear techniques as well; nonlinear plasmonic .

In this regard, the proposed methods of exploiting linear/nonlinear properties of SPR (in medicine) using nanostructures will be presented.

The method of computational analysis and potential practical approaches will be discussed..

Wednesday, 6 Ordibehesht 1395 (April. 26th, 2017), 14:00-15:00

Seminar Room (classroom A), Farmanieh Building, IPM