

Abstract Submitted
for the TSF11 Meeting of
The American Physical Society

SPP Excitation Using Extremely Low Intensity Light¹ JOHN SANDY, DANIEL DOMINGUEZ, LUIS GRAVE DE PERALTA, Texas Tech University — We present the results of experiments designed to create and detect Surface Plasmon Polaritons (SPP) using low intensity light such that SPP excitation is achieved under extremely low intensity condition. This is accomplished using an experimental apparatus which utilizes a laser-intensity varying system, a PMMA on gold on glass sample, and a Single Photon Counting Module (SPCM). We image the characteristic SPP propagation ring using a typical CCD camera and find the corresponding peak intensities using low intensity pump methods and the SPCM.

¹Texas Tech University

John Sandy
Texas Tech University

Date submitted: 09 Sep 2011

Electronic form version 1.4