

Abstract Submitted
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Near-field investigation of plasmonic silver nanowires in the mid infrared frequency range¹ STEFAN MASTEL, TERRANCE DUNLAP, YOHANNES ABATE, California State University Long Beach — We study experimentally the plasmon resonances of silver nanowires (length between 1.5-3 μm) in the mid infrared (IR) (9-11 μm) using scattering-type scanning near-field optical microscopy (s-SNOM). We identify the mid IR plasmon modes of Ag rods at different polarizations of the excitation laser via near-field phase and amplitude. By varying the wavelength of the incident laser the interaction between closely spaced nanowires is investigated.

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