

Abstract Submitted  
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**Fluorescence enhancement from silver nanostructures.**<sup>1</sup> SHY-HAUH GUO, HUNG-CHIH KAN, RAY PHANEUF, Univ. of Maryland, College Park — We report on experimental investigations of the fluorescence enhancement by nanotextured silver structures and its dependence on the incident light polarization and on the lateral periodicity. We find strong enhancement for TM mode polarization at smaller periods for thin spacer layers. Thicker spacer layers instead produce strong TE mode enhancement at small spacings.

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Shyhauh Guo  
Univ. of Maryland, College Park

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