

Abstract Submitted
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Magnon-Plasmon Interaction DAVID WISBEY, HAE-KYUNG JEONG, RALPH SKOMSKI, PETER DOWBEN, University of Nebraska-Lincoln, Physics and Astronomy Department — Spin polarized plasmons of the strained Gd on Mo(112), as well as a spin-polarized Drude tail, are observed using spin polarized electron energy loss spectroscopy. Bulk plasmon is dominated more by spin majority character at zone center than spin minority, while the surface plasmon or multipole plasmon like loss is more of spin minority character at zone center. The spin minority character of the surface plasmon increasingly dominates the spin-polarized electron energy loss spectra as the wave vector increases.

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