SUPPLEMENTARY INFORMATION

Broadband, polarization-independent resonant light absorption using ultrathin plasmonic super absorbers

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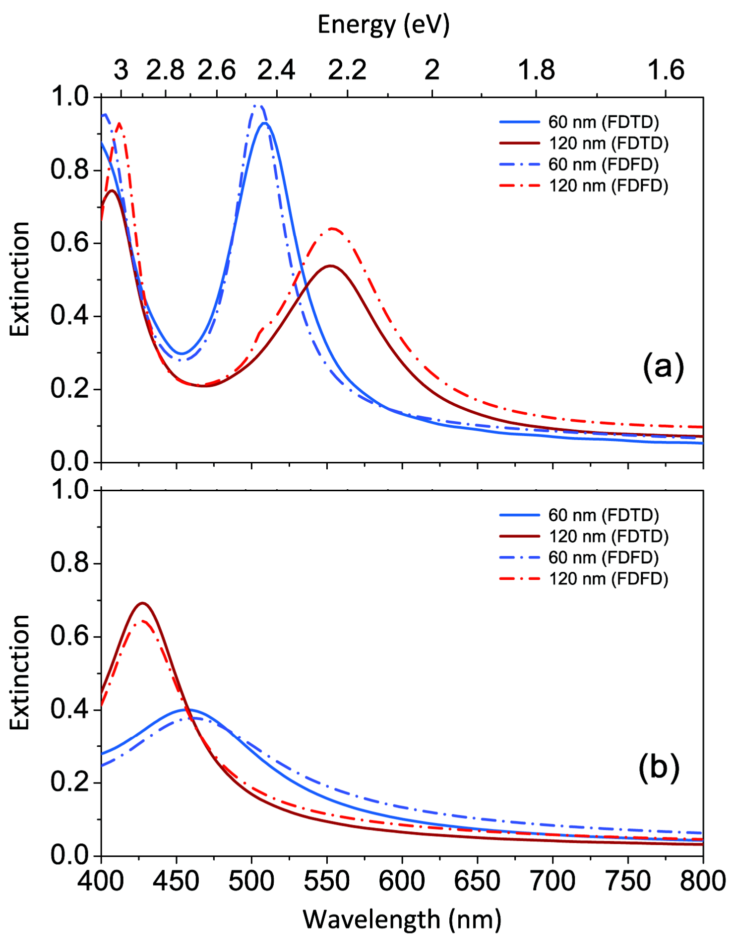
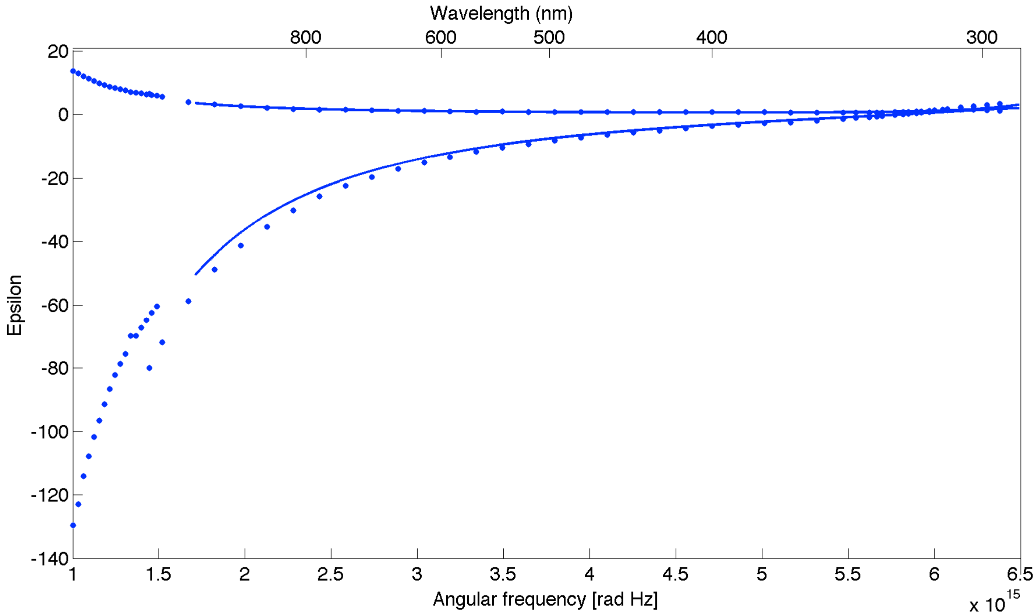


Supplementary Figure S1. Comparison of finite difference time domain (FDTD) and finite difference frequency domain (FDFD) simulations for 60 nm and 120 nm metallic gratings for (a) TM and (a) TE polarizations. The spectral positions of localized surface plasmon resonance frequencies for both simulation techniques were found to match with each other.



Supplementary Figure S2. Lorentz-Drude formulation from the literature was used to model Ag in the simulations. The values are tabulated in Rakic, Applied Optics, 1998. Rakic uses the experimental data from Palik's Handbook of Optical Constants as the experimental data set, and fits to a Lorentz-Drude model for the optical properties. This figure shows the fit to Palik's data set, with the overlying line the values of the Lorentz-Drude formulation used in our simulations.