

Plasmonics: A Route to Optical Metamaterials and Nanoscale Optical Devices

H. Atwater, Caltech

Plasmonics has provided nanoscience researchers new control of optical dispersion and light localization at nanoscale dimensions. I will discuss plasmonic concepts that are yielding metamaterials designs, and also building blocks for chip-based optical device technology with potential imaging, spectroscopy and interconnection applications in ultramicroscopy, computing, communication and chemical/biological detection.