



Teri W. Odom

Northwestern University

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Teri W. Odom is Joan Husting Madden and William H. Madden, Jr. Professor of Chemistry and Chair of the Chemistry Department at Northwestern University. She is an expert in designing structured nanoscale materials that exhibit extraordinary size and shape-dependent optical and physical properties. Her work has been recognized by election as a Member to the American Academy of Arts and Sciences and a Fellow of the Materials Research Society (MRS), the American Chemical Society (ACS), the Royal Society of Chemistry (RSC), the American Institute for Medical and Biological Engineering (AIBME), the American Physical Society, and Optica. Select honors and awards include: the RSC Centenary Prize; the ACS National Award in Surface Science; a Research Corporation TREE Award; a U.S. Department of Defense Vannevar Bush Faculty Fellowship; a Radcliffe Institute for Advanced Study Fellowship at Harvard University; and an NIH Director's Pioneer Award. Odom was founding Chair of the Noble Metal Nanoparticles Gordon Research Conference (GRC) and founding Vice-Chair of the GRC on Lasers in Micro, Nano, Bio Systems. Odom is Editor-in-Chief of *Nano Letters*.

Abstract: Nanoscale Energy Transfer in Electromagnetic Hotspots

Plasmonic nanoparticles can concentrate light into localized electromagnetic fields. These so-called hotspots can facilitate nanoscale energy transfer processes such as hot-electron generation, photothermal effects, and optical feedback. This talk will discuss how plasmonic particles arranged into periodic lattices can exhibit spatially defined hotspots with increased intensity and how control over the nanoparticle surface chemistry can enhance a wide-range of properties, from light-matter coupling to nanoscale lasing to photo-electrocatalysis.