Second-Harmonic Generation (SHG) using spatially inhomogeneous fs pulses to probe light-emitting nano-interfaces of Silicon nanocrystals

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Si nanocrystals emit light from unusual, poorly understood electronic states at their interfaces

TEM\textsubscript{00} mode of single-beam SHG generated at buried Si nano-interfaces: very weak, but it revealed the nonlocal dipole mechanism of nano-interface SHG, prompting authors to invent 2-beam SHG

Luminescence from Si nano-composite

New two-beam SHG: a robust, nano-interface-sensitive probe

Greatly enhanced SHG with 2 intersecting orthogonally-polarized fs pulses opens the door to noninvasive spectroscopy of buried nano-interfaces

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