

ASHIHARA LAB.

[Ultrafast&Nano Optical Science]

Department of Fundamental Engineering

Ultrafast Optics

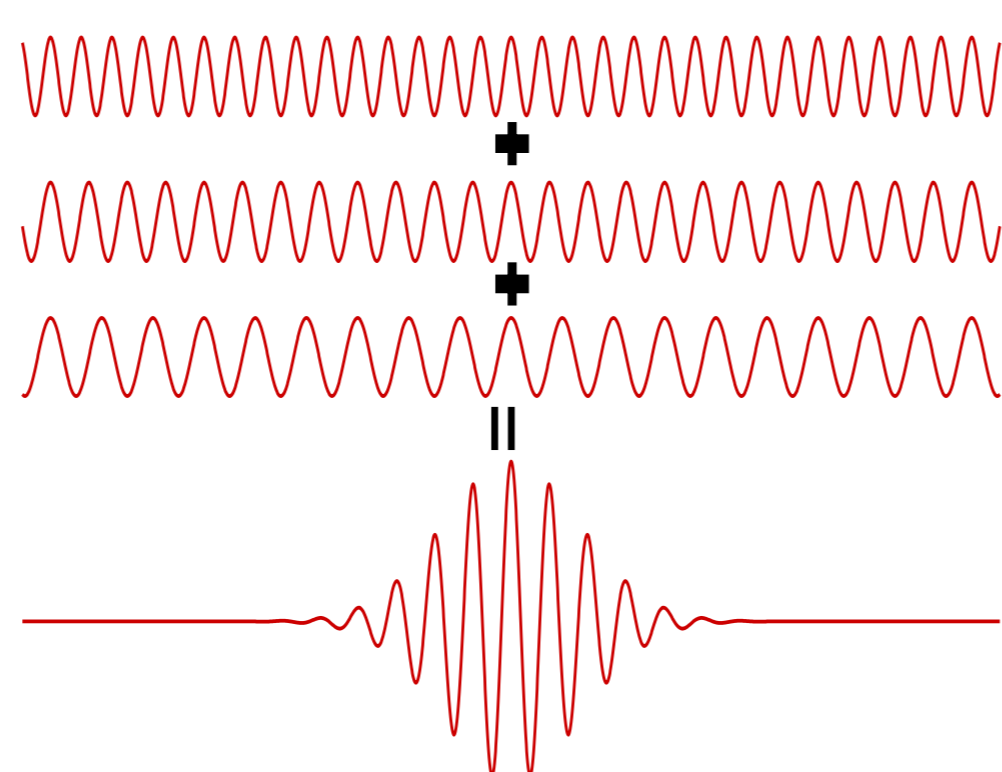
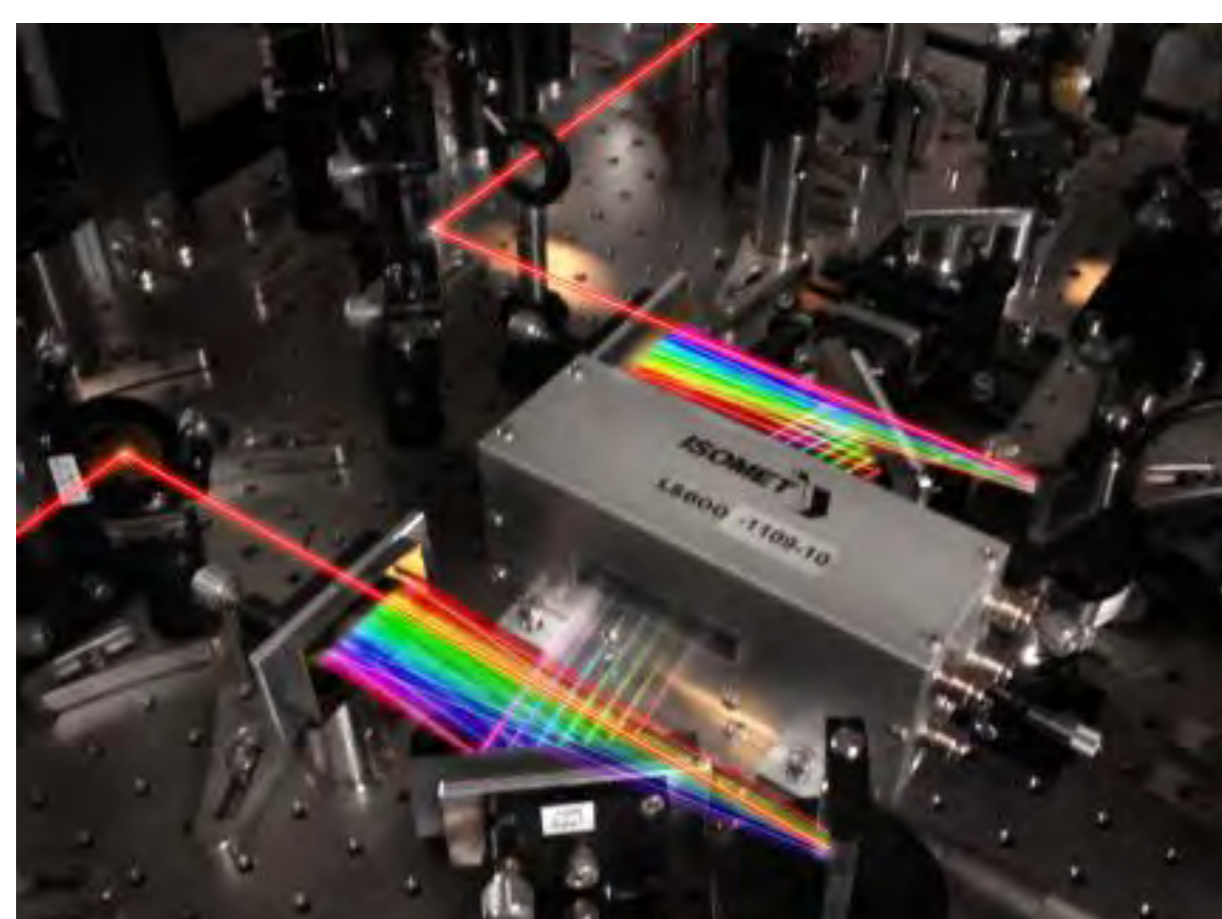
Department of Applied Physics

<http://www.ashihara.iis.u-tokyo.ac.jp>

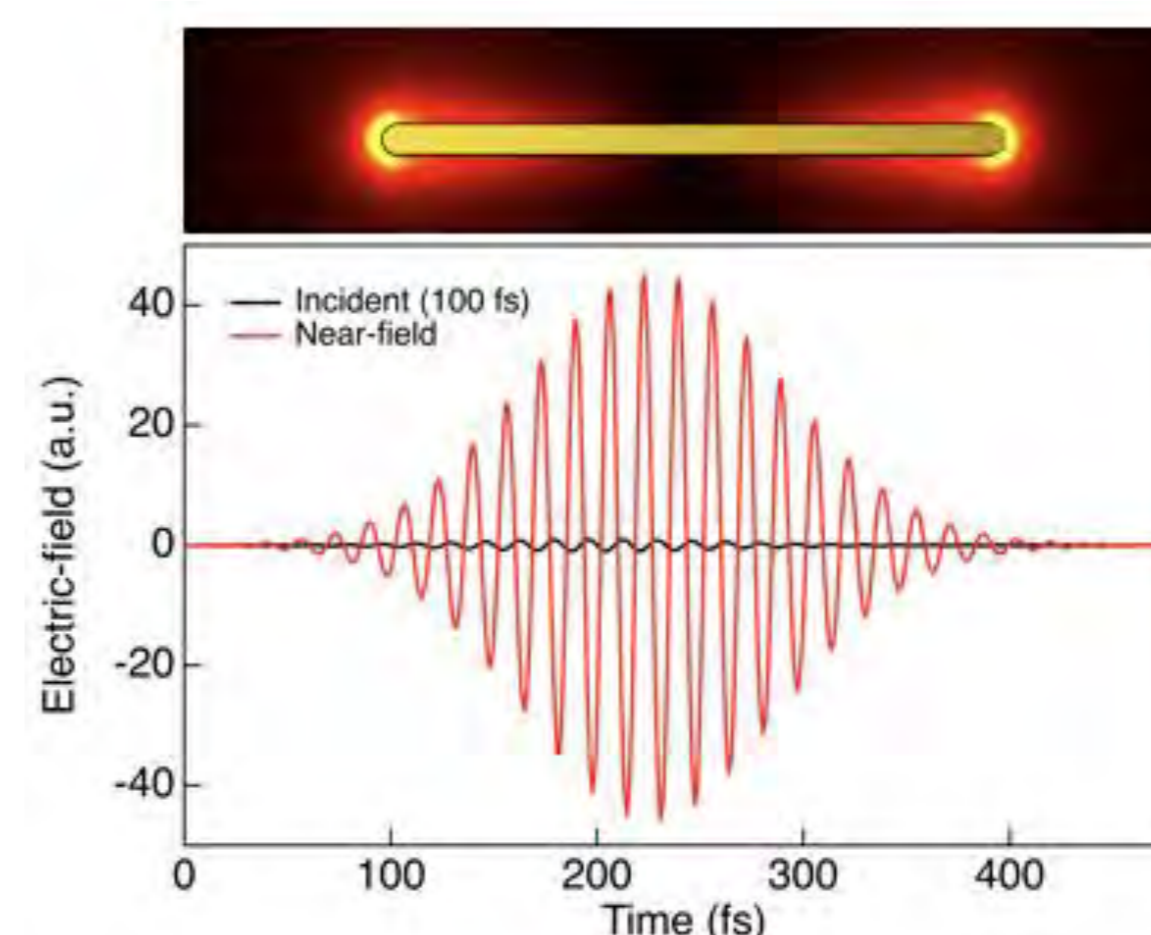
Designed Light boosts Spectroscopy and Quantum Control

By exploiting ultrafast-optics and nano-optics, we generate optical fields with sophisticated design, study novel light-matter interactions, and develop advanced spectroscopy and coherent control schemes. Future prospects include the applications into super-sensitive molecular analysis, nano-spectroscopic imaging, reaction control, and ultrafast opto-electronics.

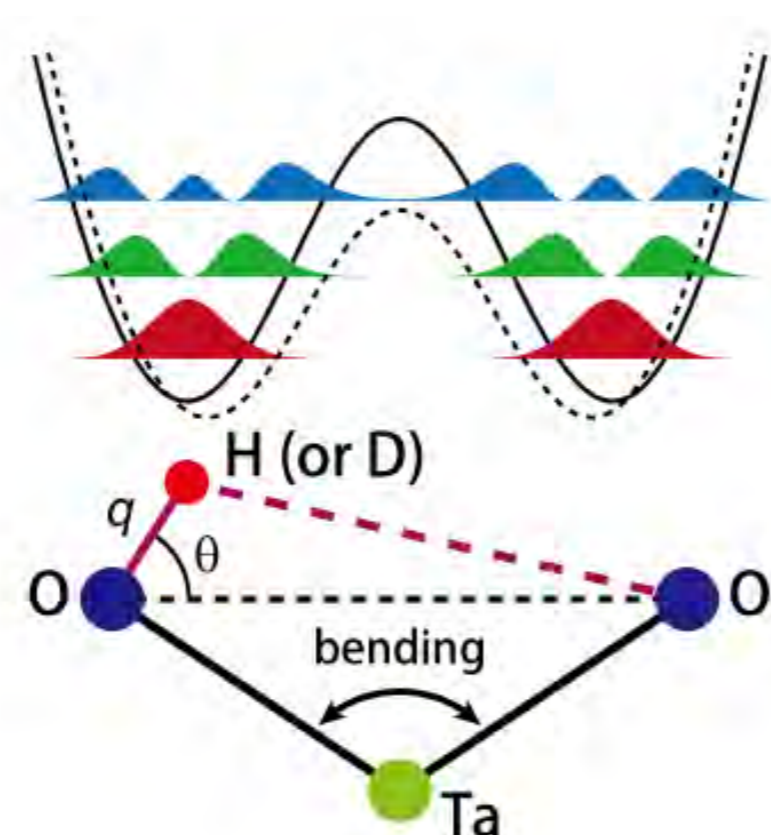
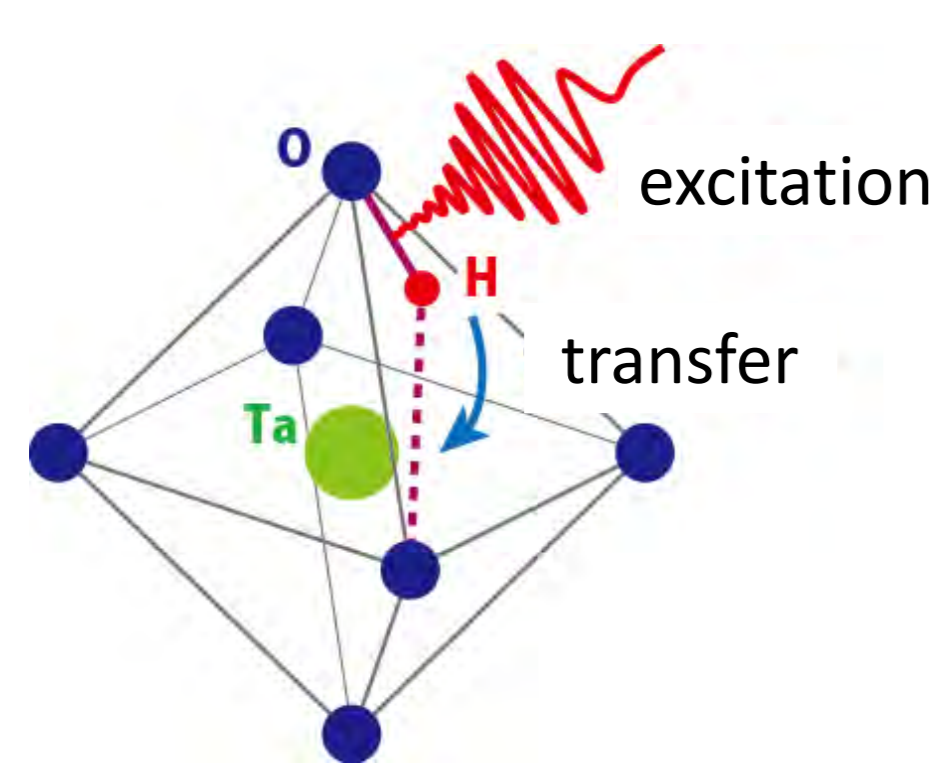
◆ Optical Synthesizer



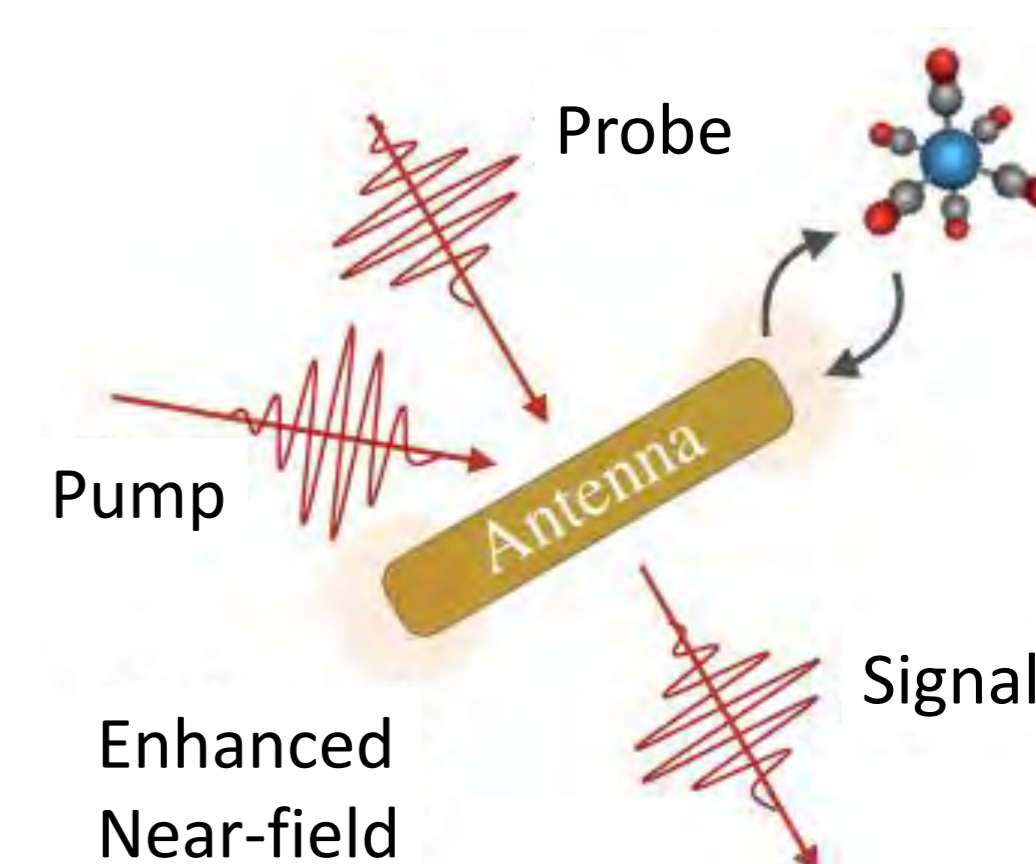
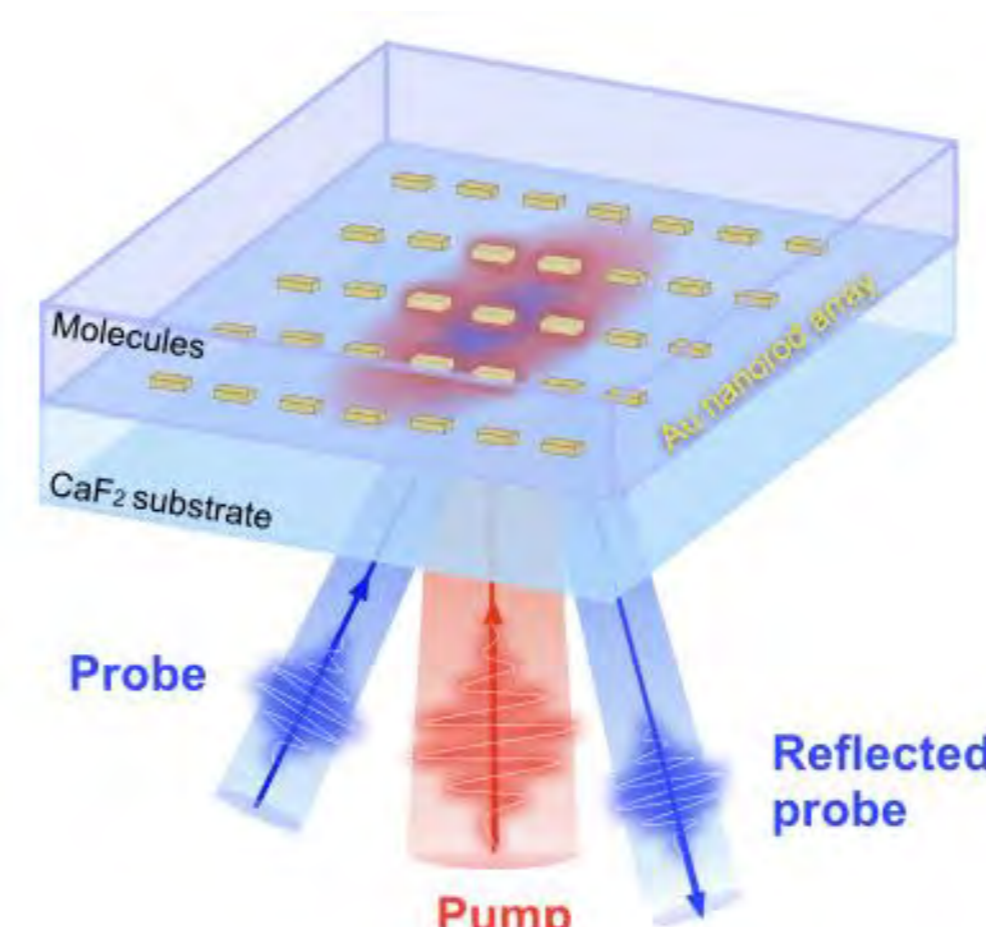
◆ Nano-scale Field Enhancement



♠ Ultrafast Spectroscopy on Proton Dynamics



♠ Antenna-enhanced Spectroscopy



♠ Strong-field Nonlinear Optics in Solids ~ Toward Light-wave Electronics

