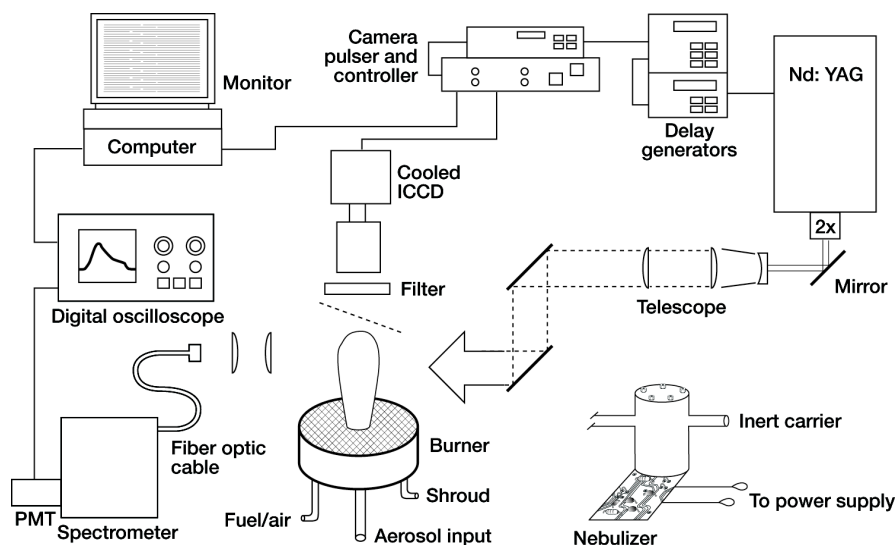


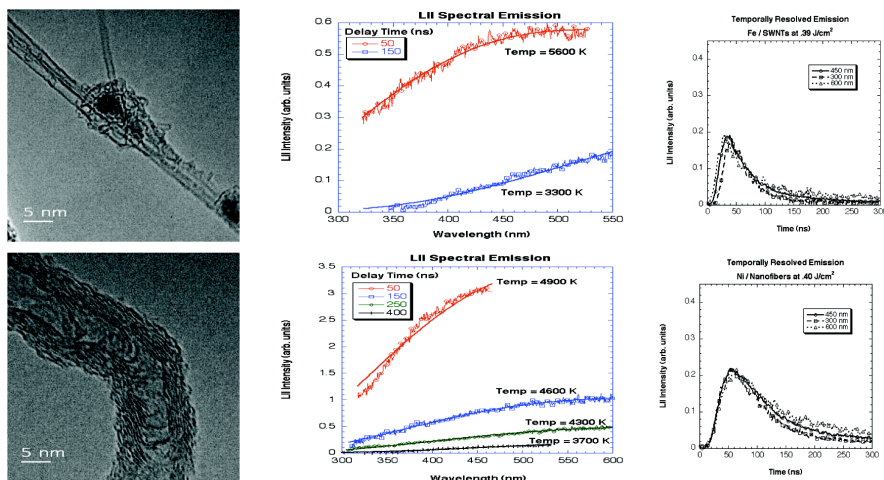
Spectroscopic Characterization of Nanomaterials

Experimental Schematic



Laser excitation is followed by detection using gated, intensified cooled CCDs and photo-multipliers, each preceded by spectral filters or spectrographs. The detected signal is then digitized for subsequent analysis.

Spectrally and Temporally Resolved Laser-Induced Incandescence Signals



Optical characterization of carbon-based aerosols (e.g. CNTS) includes spectral and temporal measurements of emission initiated by pulsed laser heating. Shown above are spectrally resolved temporal curves and temporally resolved spectral emission.