

PlasmaD-LIF

PlasmaD-LIF Laser-Induced Fluorescence Diagnostics

A tunable-excitation spectroscopy solution probes selected plasma species through laser-induced fluorescence. Gated detection separates the fluorescence signal in time and wavelength.

1. Resonant excitation

2. Plasma fluorescence

3. Spectral / time analysis

Best suited to

Species-selective plasma diagnostics and excitation-state research.

Configuration

Identify the gas species and transition before defining the laser range. Collection geometry, collisional quenching and calibration determine which physical quantities can be inferred from the signal.

Specifications

Published parameters	
Technique	Laser-induced fluorescence
Signal	Spectral and time-dependent fluorescence
Spectrograph examples	Omni-500i / Omni-750i
Grating examples	1200 or 1800 lines/mm
Detector	Configured intensified camera
Optical design	Selected for species, line and plasma geometry

Measurement features

- Transition-specific tunable excitation.
- Omni spectrograph and intensified-camera detection.
- Configurable collection optics and experiment timing.

Configuration note

Laser and timing hardware are selected for the experiment. The excitation range must cover the chosen species transition.

Full configuration: www.precisometer.com/spectroscopy/spectral-imaging/plasmad-lif