



easyLIGHT XUV

COMPACT NO-SLIT FLAT-FIELD XUV SPECTROMETER



XUV
XUV

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Features

Direct imaging of the source

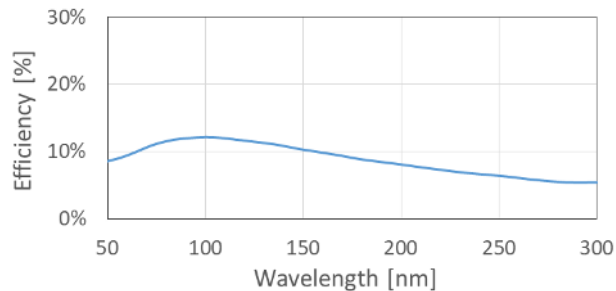
- flat-field spectrometer for the 30 to 250nm spectral range
- no need for an alignment-sensitive narrow entrance slit
- ~20x more light collection than standard spectrometers, resulting in a proportional improvement of the signal-to-noise

Accuracy and efficiency

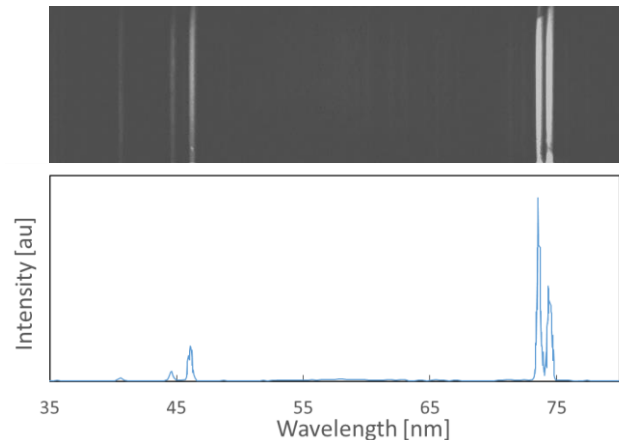
- absolute grating position monitoring for maintaining grating alignment
- grating controllable by software
- highly efficient aberration-corrected flat-field grating
- double stray-light filter
- most compact spectrometer in its range

Customization

- every spectrometer is customized to exactly match the desired application, e.g.
- interfacing to experimental chambers
- integration of customer-supplied detectors
- user-defined filter mounts



Grating efficiency into first order of diffraction. Total system efficiency ~20x higher than conventional spectrometers due to proprietary no-slit technology



Sample spectrum from photoionized plasma of neon gas, produced by nanosecond mid-infrared pulses and filtered by a 750um-thick aluminum foil

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Specifications

| | |
|--------------------------------|--|
| Topology | aberration-corrected flat-field spectrometer |
| Wavelength range | 30-250nm |
| Source distance | flexible |
| Detector | CCD or MCP/CMOS |
| Operating pressure | $< 10^{-6}$ mbar (UHV version available) |
| No-slit technology | yes |
| Entrance slit | optional |
| Grating positioning | motorized closed-loop |
| Spectral filter insertion unit | yes |
| Control interfaces | USB or Ethernet |
| Software | Windows UI / Labview, VB, C, C++ SDK |
| Customizable | fully customizable |
| Options | non-magnetic, rotated geometry, etc |

| | |
|-----------------|------------------|
| Dispersion | ~ 2.0 nm/mm |
| Resolution | < 0.1 nm |
| Flat-field size | 75mm |
| Deviation angle | 94° |