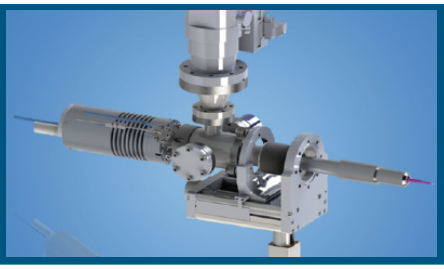
rbd instruments

innovations for surface science

multi-gas ultra-high flux UV source

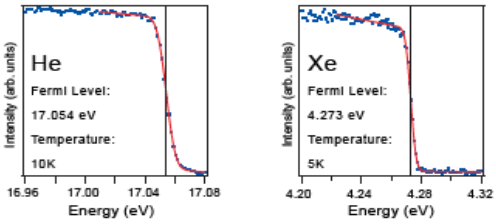
BL-1000, BL-1010 , BL-1020, BL-1100



description

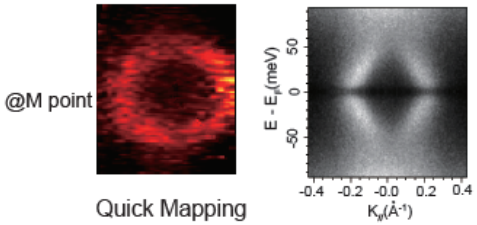
The new FERMI BL-1000 is an ultra-high efficiency UV source based on revolutionary plasma local field mechanism, integrated with latest solid RF source technology. It provides orders of magnitude higher efficiency than traditional plasma-based UV sources. It is an electrode-free and ignite-free universal UV source, which can work with various gases and gas mixtures. Applications include photoemission, mass, and atomic absorption spectroscopy.

Gold Thin Film



Spectrum excited by He and Xe radiation

FeSe Thin Film



models

BL-1000: UV Source head only (no linear shift or differential pumping), for multiple working gas (He,Ne,Ar,Kr,Xe...), compatible with other monochromators such as SPECS TMM304 and VG SCIENTA VUV5K

BL-1010: UV Source head with two stage differential pumping and linear shift, for multiple working gas (He,Ne,Ar,Kr,Xe...), compatible with other monochromators such as SPECS TMM304 and VG SCIENTA VUV5K

BL-1020: UV Source head with Hell DBR mirrors, two stage differential pumping and linear shift, only for working gas He, output monochromatization photon energy (40.8eV)

BL-1100: UV Source head with focus collimator and linear shift, one stage differential pumping, only for working gas Xe and Kr, output monochromatization photon energy (8.43eV and 10.03eV)

specifications

Multiple Working Gases	He, Ne, Ar, Kr, Xe, ... (depends on model options)
Photon Energy	8.4 eV - 40.8 eV (30 nm - 147 nm)
Photon Flux	> 5 E17 Photons/Sr sec
Resolution	< 1 meV
Integrated Flowmeter	All metal structure, ultra-clean
Power Supply	Compact solid RF source driven by 24 V / 200 W power source
Seals	UHV compatible, all metal seals
Bakeable	Bakeable to 120° C

All specifications are subject to change without notice.

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