

THE L-SHELL SPECTROSCOPY OF HEAVY ELEMENTS IN LASER
PRODUCED PLASMAS

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The L-shell spectra of heavy elements from germanium to molybdenum have been observed in plasmas generated by high power neodymium lasers at Queens University, Belfast and the Central Laser Facility (Rutherford Laboratory).

The spectra were recorded with convex crystal spectrometers with either a mica crystal (radius of curvature 3.81 cm) or a PET crystal (radius of curvature 15 cm). The spectral resolution is 1 in 1000. The spectra show lines from neon-like ions and associated satellites, fluorine-like ions, hydrogen and helium-like ion wavelength calibration lines and satellites from the latter. These will be discussed and some identifications given.