

QXAFS Design on SSRF XAFS Beamline

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A Quick X-ray Absorption Fine Structure (QXAFS) scanning mode on SSRF XAFS beamline for time-resolved experiment is introduced. It is based on the VME system. High performance current amplifier and 16bit ADC are used for data collection. The speed of the beamline double crystal monochromator (DCM) will up to 1 degree/s, also a line and circle modified method on the second crystal Z-axis movement is used to make the fixed height-exit during the QXAFS scanning process. QXAFS experiments within seconds can be achieved. Fluorescence QXAFS measurement will be developed with high photon flux at sample (1×10^{13} photons/s (Si (111) @ 10keV)) and a 32-element Ge solid detector.

Key Word: QXAFS, Time-resolved, Ge detector, fixed height-exit