

A New NEXAFS System Installed at SORIS Beamline and Studies of Molecular Orientation of Rubbed and Laser Processed Polyimide Films

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Abstract

A new experimental system of near edge x-ray absorption fine structure NEXAFS for C, N and O K-shells was completed at SORIS beamline at BL-8. NEXAFS spectra of thin films of polyimide and liquid crystals were measured. By the polarization dependence of NEXAFS spectra measured as a function of the incident angle of synchrotron radiation, molecular orientations of polyimide films modified by rubbing and laser irradiation were determined. Effects of uv-laser irradiation on the films were found.

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