Recent Developments for X-ray Optics, from EUV to hard X-Rays

P.U. Pennartz, L. Jiang, Y. Platonov, B. Verman, N. Grupido, P. Oberta*
Rigaku Innovative Technologies . Auburn Hills, USA,
** Rigaku Innovative Technologies, Prague, CZ*

In the last 20 years, multilayer optics for the broad band of radiation from 40 eV to 100 keV have revolutionized the measurement capabilities and the experimental designs for elemental analysis, diffraction and scattering equipment. In addition, EUV-L applications have pressurized our R&D department for higher reflectivity multilayer structures at lower costs and bigger diameter substrates.

Also crystal monochromator developments and replicated optics have driven our R&D.

We will show the latest results of our developments for a wide band of applications with new multilayer structures, crystal optics and replicated optics.