Rigaku

Application to Composition Analysis

In-line X-ray Metal Film Monitor: MFM 310

PCM/OTS Application

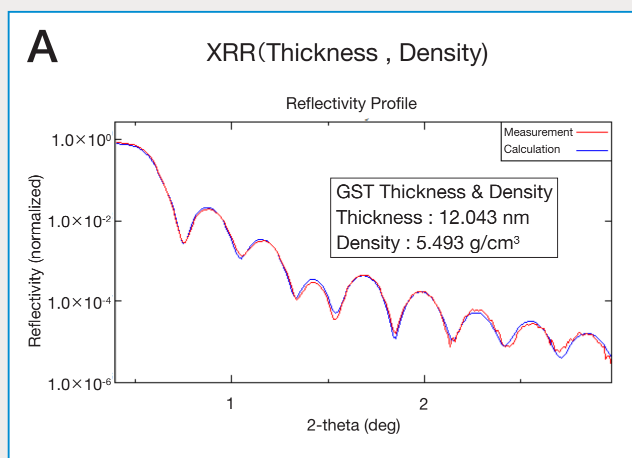
XRR/XRF combined analysis

Thickness and Composition can be determined at the same measurement by XRR and XRF combined analysis

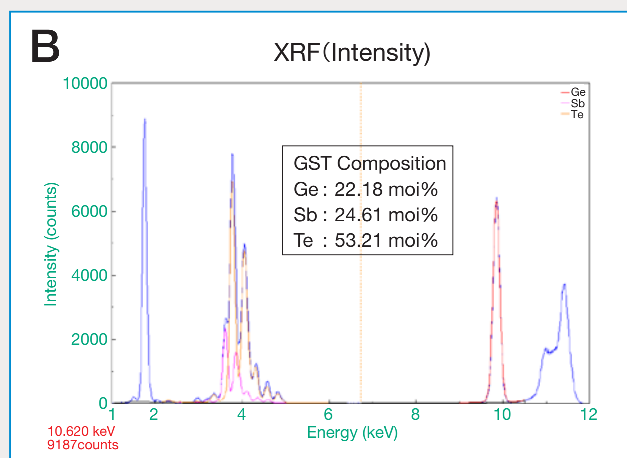
※XRR : X-ray Reflectivity、XRF : X-ray Fluorescent

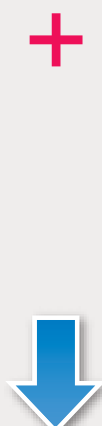
Combined analysis

Step.1 Thickness/ Density : XRR (Analysis result)



Step.2 X-ray intensity : XRF
(Analysis : *Calibration curve method)





Thickness and density can be measured by XRR (Fig. A), and the composition ratio of the phase-change material elements can be calculated from XRF measurements (Fig. B).
High-precision results are achieved that correspond to changes in film thickness.

NiSi Application

XRD

XRD peak position measurement for NiSi phase identification