



Figure 1. Supplementary synchrotron X-ray diffraction patterns of (a) modified CaFe_2O_4 -type FeCr_2O_4 , (b) CaTi_2O_4 -type FeCr_2O_4 and (c) modified ludwigite-type $\text{Fe}_2\text{Cr}_2\text{O}_5$ at ambient conditions. The diffraction patterns in the whole 2θ range up to 75° were used for Rietveld refinements. Insets of (a)-(c) are the results of Rietveld refinements in the high angle regions. Data points and solid lines show the observed and the calculated profiles, respectively, and the difference between them is shown at the bottom. Bragg peak positions are marked by small ticks. These lines are for main phases, Cr_2O_3 eskolaite and Re from top to bottom.