



**Supplementary Figure 1.** Threshold testing for two different scales of AlK $\alpha$  X ray maps indicate that the difference small changes in image threshold can have an influence on calculated crystallinities (left column = 100  $\mu\text{m}^2$ ; right column = 500  $\mu\text{m}^2$ ). Threshold value and calculated proportion of crystals (black) are indicated for each image. Original gray scale images are shown in panels a and b.