



Supplementary Figure 1. Infrared spectra of the carbonate region in apatite from sample BA7. Melt and apatite spectra were acquired from grains mounted in In metal, using an ATR attachment on a Nicolet i10 infrared microscope with the signal coming from a $\sim 8\mu\text{m}$ area. The CHAP (carbonate-bearing hydroxyapatites) spectra are from Fleet (2017) who used powdered samples in a KBr pellet. The AB CHAP is reported to have 66% carbonate on the A site, the rest on the B site. A CHAP is pure A site carbonate. It is clear that sample BA7 is dominated by A-site carbonate with only a very minor contribution from B-site carbonate.