



**Figure S2. A.** Rank order plots show weighted mean calculations and the deviation from the CA-ID-TIMS age of individual runs for treated and untreated aliquots of reference material GHR1. **B.** Concordia diagram of all U-Pb analyses for treated and untreated aliquots of GHR1. **C.** Example CL images of treated and untreated aliquots of GHR1.