



**Figure S3. 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 49127. **B.** Concordia diagram of all U-Pb analyses for treated and untreated aliquots of 49127. **C.** Example CL images of treated and untreated aliquots of 49127.