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Supporting information for article:

**The local structure of Ge quantum dots determined by
combined numerical analysis of extended X-ray absorption
fine structure and X-ray absorption near-edge structure data**

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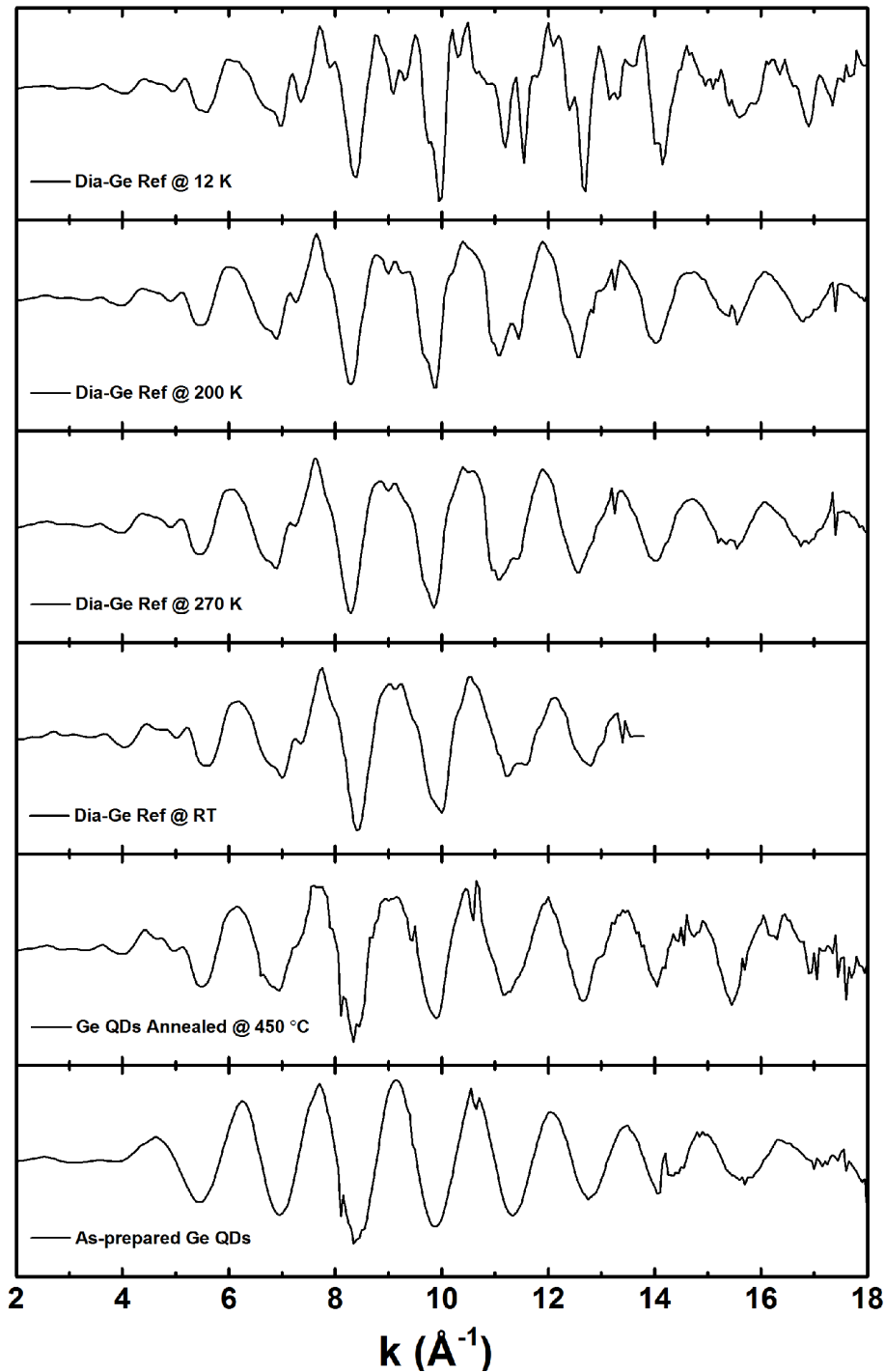


Figure S1 The $\chi(k)$ spectra for as-prepared and annealed Ge QDs samples, together with the $\chi(k)$ data for all the diamond-type Ge reference spectra previously measured at different temperature (at RT=room temperature, 270 K, 200 K and 12 K). For the Dia-Ge Ref measured at RT, the k -max was taken only to 14 \AA^{-1} , which is not uniform with that of the Ge QDs samples, therefore it was not included in the IFEFFIT fitting for the extraction of the amplitude factor (S_0^2).

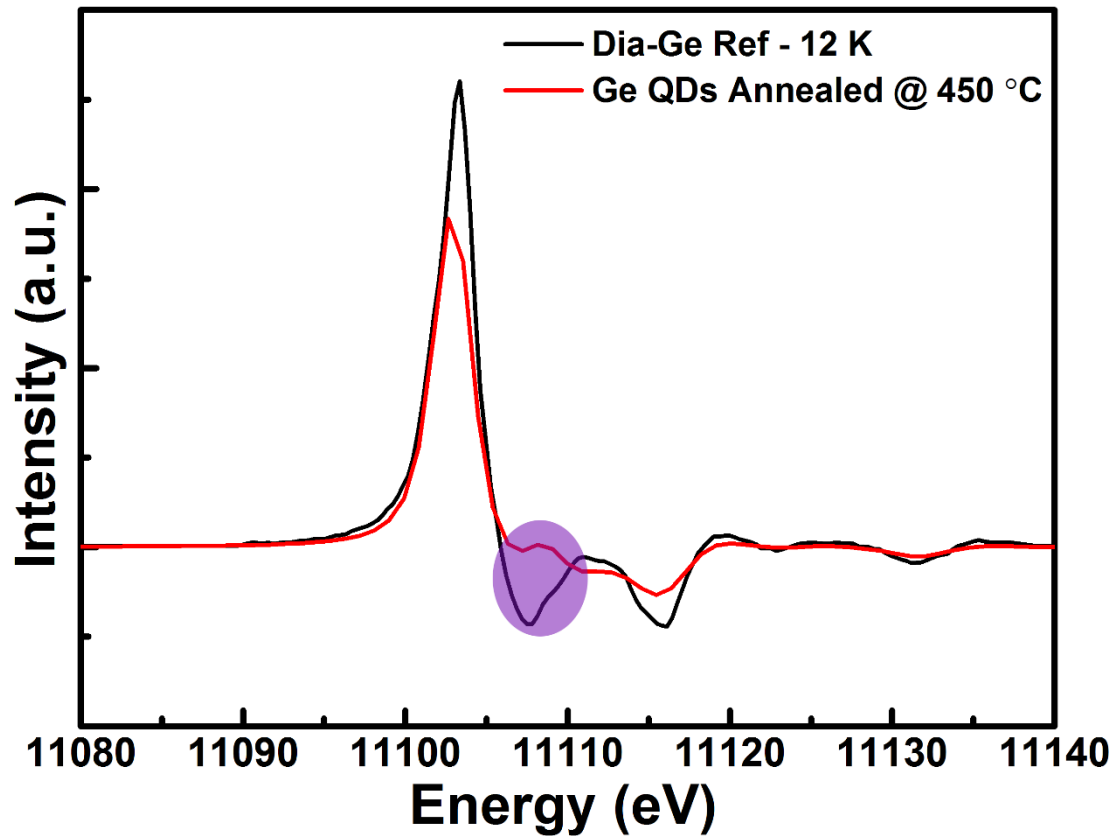


Figure S2 The 1st derivative of the XANES spectra (after normalization) for both Dia-Ge reference and our annealed Ge QDs. The shaded region in the figure is where the feature ‘B’ (for our as-prepared and annealed Ge QDs, see the main text Fig. 3 & 4) is located. And here it can be clearly observed the difference between the two XANES spectra, which further supports the claim that the feature ‘B’ for our annealed Ge QDs is indeed extra as compared to the Dia-Ge reference.