Our approach to resolving the issue of Ga/Ge-ordering in the framework T-site of the gallogermanate cancrinite was to use resonant diffraction near the Ga or Ge absorption edge, and thereby introduce a scattering contrast between the two T-sites. This contrast increases from 1.03:1 for the off-edge data to 1.50:1 for the Ga K-edge data (10367 eV, $f'_{\text{Ga}} = -11.68$, $f'_{\text{Ge}} = -2.40$). Calculations using the DLS-minimized GaGe-CAN structure model and the anomalous scattering factors at the Ga K-edge indicated that the intensities of the $hh2h_l$ reflections with $l = 2n + 1$ would increase to as much as 1.6% of the strongest ($0002$) reflection; 1.0% when the calculation is performed at the Ge K-edge (11103 eV, $f'_{\text{Ga}} = -1.87$, $f'_{\text{Ge}} = -10.41$). The scattering contrast expected from neutron diffraction ($b_{\text{Ge}} = 0.82$, $b_{\text{Ga}} = 0.72$ pm) is less than that from resonant diffraction at the Ga K-edge (1.14:1 compared to 1.50:1), and the calculated intensities of the $hh2h_l$ reflections with $l = 2n + 1$ would only be 0.8% of the strongest ($123f$) reflection. Resonant diffraction near the Ga K-edge was therefore chosen to observe a set of the $hh2h_l$ reflections with $l = 2n + 1$. The on-edge scan was performed at 10380 eV ($\lambda = 1.1943$ Å) over the ($112f$) and ($336f$) reflections. These reflections are clearly observed, with the observed intensities of these reflections close to 2.8 and 1.1% of the strongest ($0002$) reflection, respectively [1]. This establishes the space group $P6_3$ and the ordering of the Ga/Ge atoms in the T-sites of GaGe-CAN (see X7B section).

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