



Figure S1. Room temperature powder X-ray diffraction pattern of representative polycrystalline  $A_8\text{Ga}_x\text{Sn}_{46-x}$  ( $A = \text{Rb}, \text{Cs}; x \approx 8$ ) phase. All discussed samples are similar. Calculated pattern is simulated from the crystallographic data of Cs-bearing phase presented in Table 1.  $\beta$ -Sn phase marked with an asterisk (\*).