



Fig. 1. (a) Design of GeSi/GeSn SL. (b) HRXRD scans of GeSi/GeSn SLs grown at 200 and 250 °C showing multiple satellite peaks with Pendellösung fringes. (c) The raw ATP data used to find the Si and Sn compositions across the entire SL sample (top), the compositions vs depth shows interdiffusion among the designed binary SiGe and SnGe layers (bottom). (d) TEM imaging validates the interdiffusion seen in the APT data and reveals instances where the shutter operation was delayed. (e) Analysis of the SRO parameter, $\alpha_{\text{Si-Si}}^{\text{1NN}}$, shows a significant difference between CVD and MBE grown samples indicating MBE as a key growth method for studying SRO.