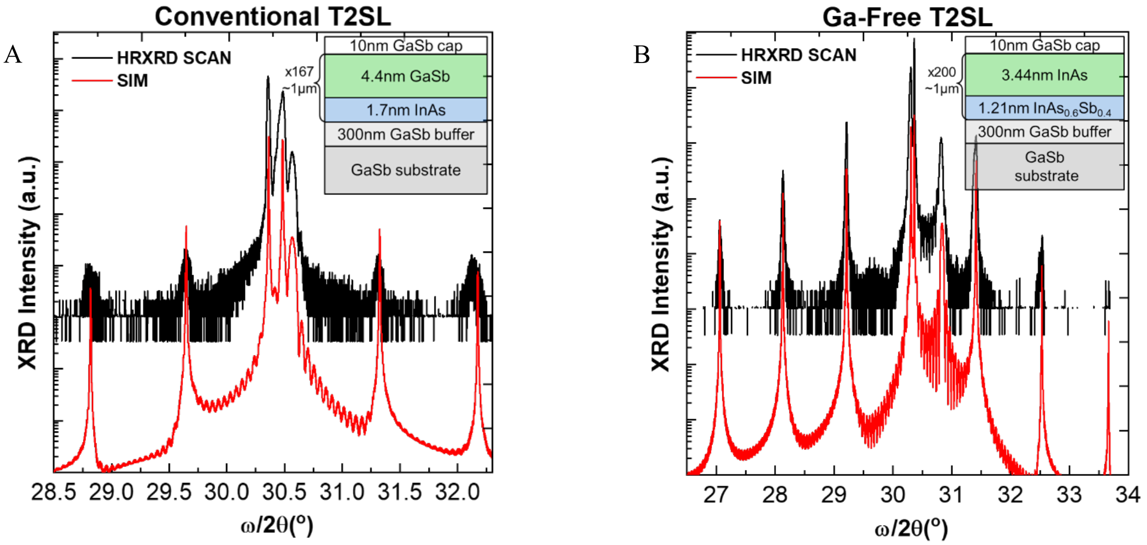

Fig.1: (A) InAs/GaSb and (B) InAs/InAsSb HR-XRD with sample design inlay in top right-hand corner. XRD shows high quality growth that closely matches simulated response demonstrating successful MBE growth of each sample.

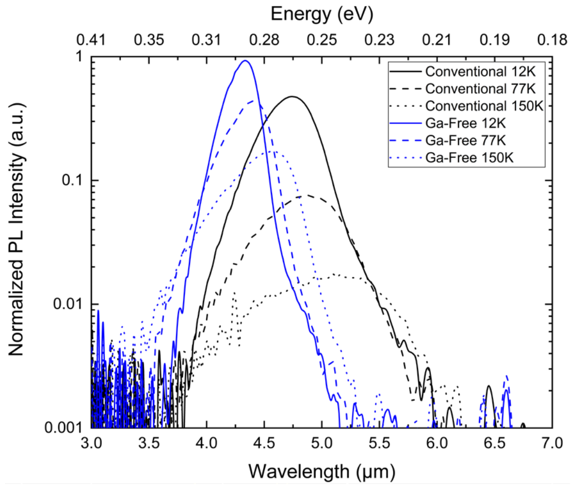

Fig.2: InAs/GaSb and InAs/InAsSb normalized PL using FTIR

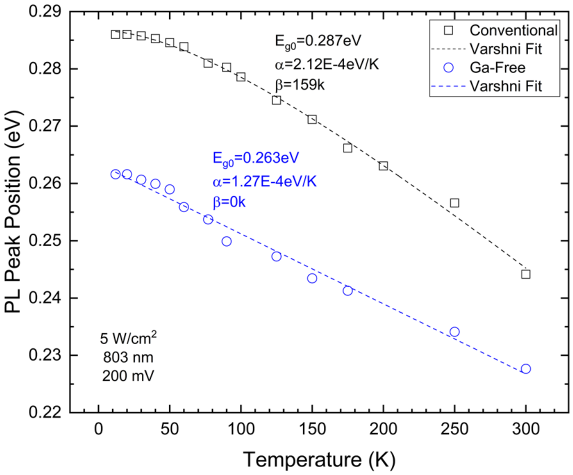

Fig.3: PL peak position shift with temperature and Varshni fitting.

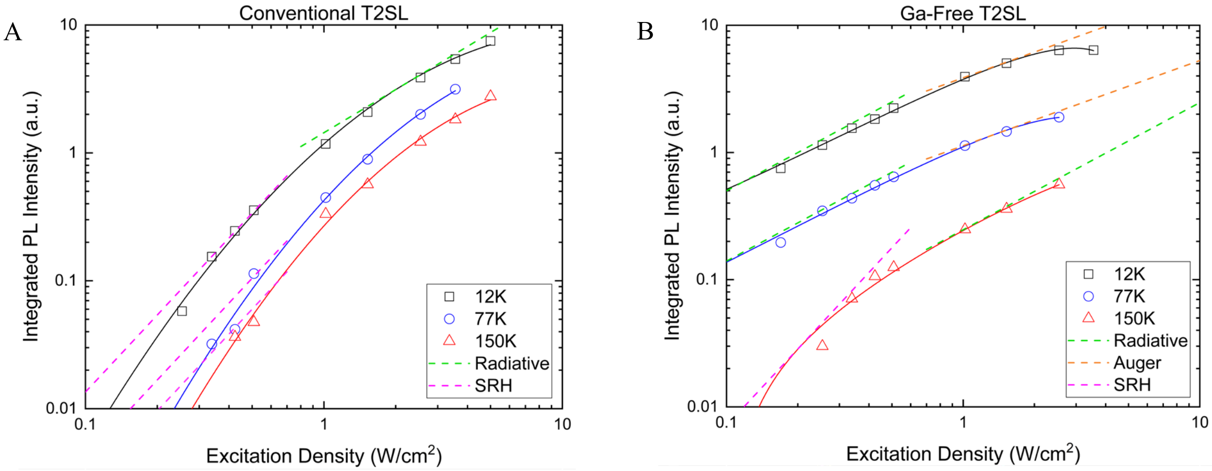

Fig.4: (A) InAs/GaSb and (B) InAs/InAsSb integrated PL intensity vs. excitation-density with tangent lines indicating dominate recombination.

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