

































on the device characterization based on the theoretical and experimental investigations which allows to improve both the device design and performance. Despite of the fact that the GaSb-based material system (AlGaIn)(AsSb) is the material of choice for achieving highly reliable devices in the mid-infrared wavelength regime, the research on EP GaSb-based VCSELs is still at a preliminary stage. This work is directed toward addressing aspects of VCSEL design and performance that may be an input to the ongoing research and development efforts.