

Ordered-InGaPSb/GaAs-based FET and HBT structures grown by MOVPE

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Abstract

We investigated electrical characteristics of InGaP/GaAs heterostructures. We found that Sb doping significantly improves carrier profile at heterointerface. InGaPSb-channel FETs, InGaPSb channel DH-HEMTs, and InGaPSb HBTs are also studied. We obtained good performance of these structures, suggesting InGaPSb can be used to device structures.