G00002

Abstract

"Improved Buffer for Semiconductor Structures"

A semiconductor structure having high electron mobility, for use in high electron mobility transistors (HEMT's) or field effect transistors (FET's), said structure comprising: a GaAs substrate, an epilayer of a high Indium content material, and an InAs buffer layer located intermediate the substrate and the epilayer, wherein the GaAs substrate has a first lattice constant, the epilayer has a second lattice constant different from the first lattice constant, and the InAs buffer layer is adapted to release strain caused by mismatch of said different lattice constants.

[No suitable Figure]