

COMPARATIVE STUDY OF SENSOR AND MATERIAL PROPERTIES ON $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}/\text{InP}$ FABRICATED BY MBE AND MOCVD

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ABSTRACT

We report the galvanomagnetic properties of Hall and magnetoresistor cross-shaped sensors with lateral dimensions 2 x 3 mm. The comparative study of epi-layers fabricated by MBE and MOCVD are presented. The measured parameters of these devices gave an interesting insight into their behaviour at temperatures ranging from LHe to room temperature. The large changes of the galvanomagnetic parameters vs. magnetic field and temperature allow these devices to be used as field or temperature sensors.