

# **GaInNP: A Novel Material for Electronic and Optoelectronic Applications**

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## **Abstract**

Adding ~0.5% N to GaInP grown on GaAs results in near zero conduction band discontinuity, and, thus, GaInNP could be an ideal material for HBTs. Adding also ~0.5% N to GaP results in direct bandgap, and GaNP/GaP light-emitting diodes are demonstrated.