

High Performance, High Electron Mobility Transistors With Graphene Hole Extraction Contacts

View U.S. Patent No. 10,734,537 in PDF format.

WARF: P170305US01

Inventors: Zhenqiang Ma, Tzu-Hsuan Chang

The Invention

Radiation detectors based on high electron mobility transistors (HEMTs) are provided. Methods for detecting ultraviolet radiation using the HEMTs are also provided. The transistors are constructed from an intrinsic high bandgap semiconductor material with a built-in polarization field sandwiched between graphene and a two-dimensional electron gas (2DEG).

Additional Information

For More Information About the Inventors

• Zhenqiang Ma

Tech Fields

• Analytical Instrumentation, Methods & Materials : Sensors

For current licensing status, please contact Jeanine Burmania at jeanine@warf.org or 608-960-9846