

# Hydrogen-Doped Germanium Nanomembranes for Photodetectors

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### The Invention

Photodetectors based on hydrogen-doped, single-crystalline germanium, including waveguide integrated photodetectors for photonic chip applications are provided. Hydrogen doping provides the single-crystalline germanium with increased radiation absorption in the near infrared region of the electromagnetic spectrum, including at wavelengths of 1550 nm and above.

# **Additional Information**

## For More Information About the Inventors

• Zhenqiang Ma

#### **Tech Fields**

• Semiconductors & Integrated Circuits: Components & materials

For current licensing status, please contact Jeanine Burmania at <a href="mailto:jeanine@warf.org">jeanine@warf.org</a> or 608-960-9846