



Arrays Of High-Aspect-Ratio Germanium Nanostructures With Nanoscale Pitch And Methods For The Fabrication Thereof

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The Invention

Methods for fabricating thin, high-aspect-ratio Ge nanostructures from high-quality, single-crystalline Ge substrates are provided. Also provided are grating structures made using the methods. The methods utilize a thin layer of graphene between a surface of a Ge substrate, and an overlying resist layer. The graphene passivates the surface, preventing the formation of water-soluble native Ge oxides that can result in the lift-off of the resist during the development of the resist.

Additional Information

For More Information About the Inventors

- [Max Lagally](#)

Tech Fields

- [Semiconductors & Integrated Circuits : Design & fabrication](#)

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