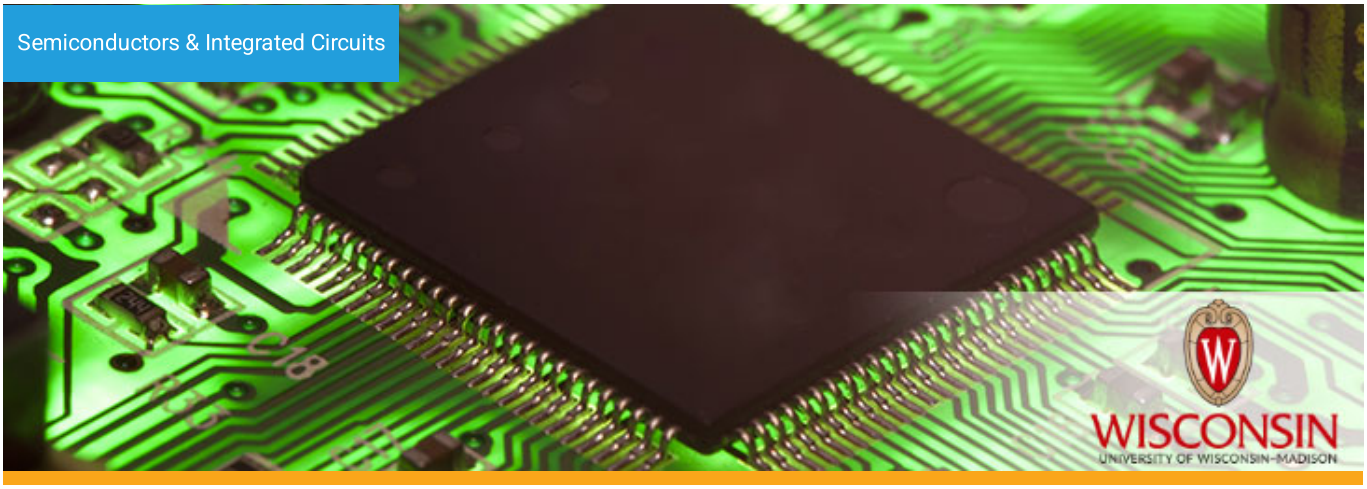

Atomic Layer Chemical Patterns For Block Copolymer Assembly

View U.S. Patent No. 9,927,706 in PDF format.

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The Invention

Provided herein are methods of directed self-assembly (DSA) on atomic layer chemical patterns and related compositions. The atomic layer chemical patterns may be formed from two-dimensional materials such as graphene. The atomic layer chemical patterns provide high resolution, low defect directed self-assembly. For example, DSA on a graphene pattern can be used achieve ten times the resolution of DSA that is achievable on a three-dimensional pattern such as a polymer brush. Assembly of block copolymers on the atomic layer chemical patterns may also facilitate subsequent etch, as the atomic layer chemical patterns are easier to etch than conventional pattern materials.

Additional Information

For More Information About the Inventors

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Tech Fields

- Semiconductors & Integrated Circuits : Components & materials
- Semiconductors & Integrated Circuits : Lithography

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