Site-Specific Stamping of Graphene

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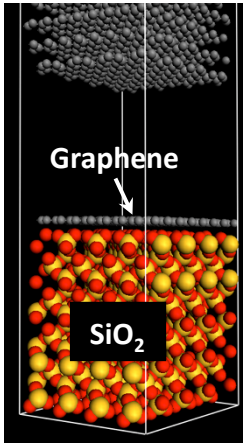
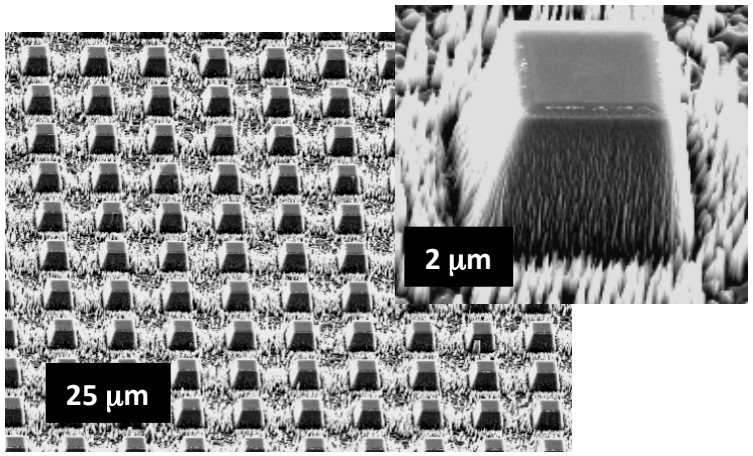
Graphene (2-D carbon) is being considered for spintronics due to its low spin-orbit coupling. While graphene-based devices are being made one-at-a-time successfully, there is a need for a high-throughput fabrication method.

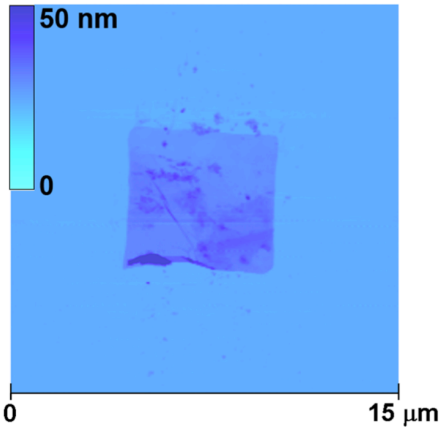
***Ab-initio* Modeling**



Graphite Stamp



Stamped Graphene on SiO_2



CEM researchers conducted theoretical and experimental studies, and demonstrated the feasibility of a new method of site-specific stamping of few-layers graphene. The site-specific nature of the large-area patterned stamps could enable high-throughput fabrication of future graphene-based devices.

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