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Partial Graphene Growth on Copper By Chemical Vapor Deposition CALEB HUSTEDT, Brigham Young University — The successful growth of large-area, mono-layer graphene films has the potential to revolutionize applications of graphene in electronic and mechanical devices. Recently, CVD growth has been used to realize such films on metal surfaces. Unfortunately, defects in the graphene cause decreased mechanical and electrical properties. In our study we examine the growth process of CVD graphene on copper. We examined the structure of graphene at its individual nucleation sites by partial graphene growth. We found that graphene growth has significant differences on varying copper surfaces.

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