

Tip-based chemical vapor deposition with a scanning nano-heater.

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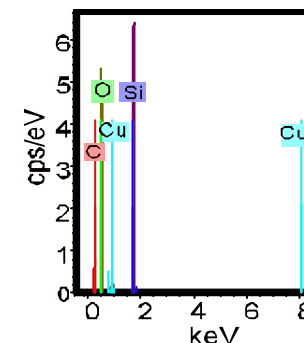
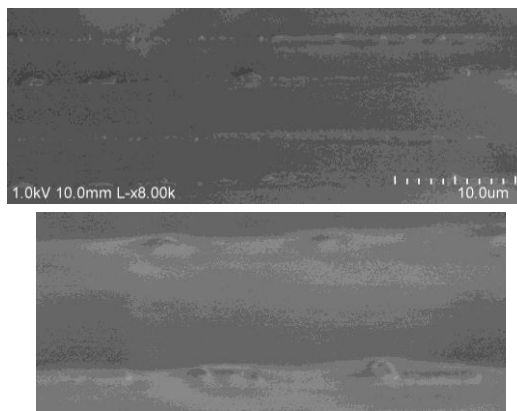
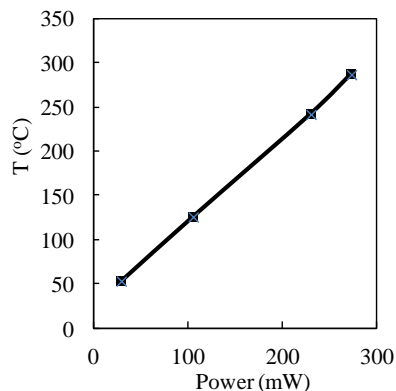
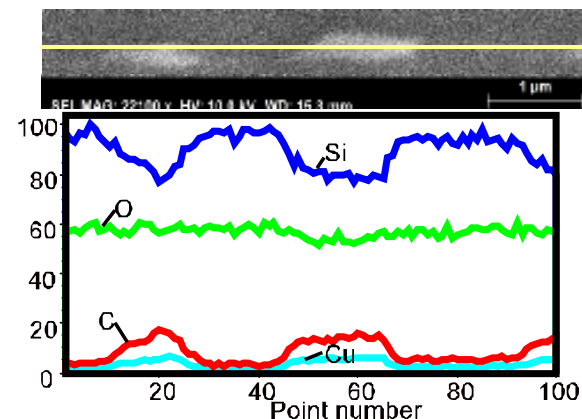
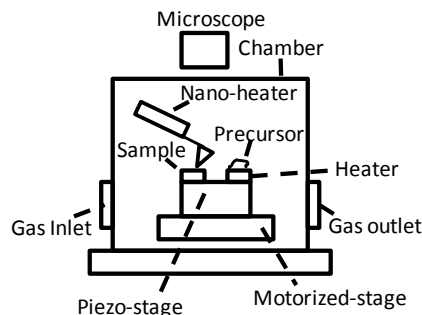
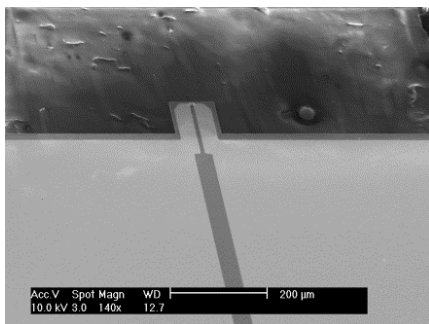
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In this preliminary effort a moving nano-heater directs a chemical vapor deposition reaction (nano-CVD) demonstrating a tip-based nanofabrication (TBN) method. Localized nano-CVD of copper (Cu) and copper oxide (CuO) on a silicon (Si) and silicon oxide (SiO₂) substrate from gasses, namely sublimated copper acetylacetonate (Cu(acac)₂), argon (Ar), and oxygen (O₂), is demonstrated. This technique is applicable to many other materials, structures, and treatments.



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