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Title: "Tools For Contacting Molecules"

Abstract: This talk will cover our recent efforts at making reliable electrical contacts to molecules that are quick and simple to construct. We use two tools: eutectic GaIn (EGaIn) and a form of nanofabrication that uses an Ultramicrotome (Nanoskiving). The former makes direct, reversible electrical contact to self-assembled monolayers under ambient conditions using an extremely simple bench-top setup and is suited for the rapid screening of the electrical properties of molecules. The latter is non-photolithographic and produces nearly-atomically-flat nanometer-sized metallic structures that can be templated on a molecular scale to form irreversible contacts suited for integration into electronic devices.