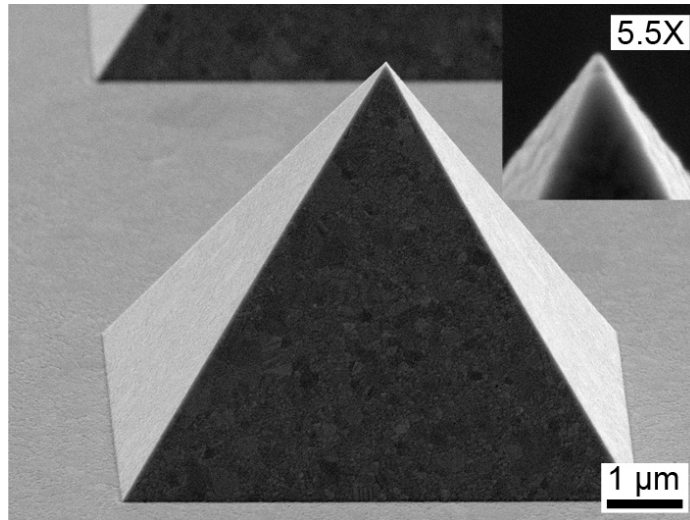


Smooth Patterned Metals for Plasmonics

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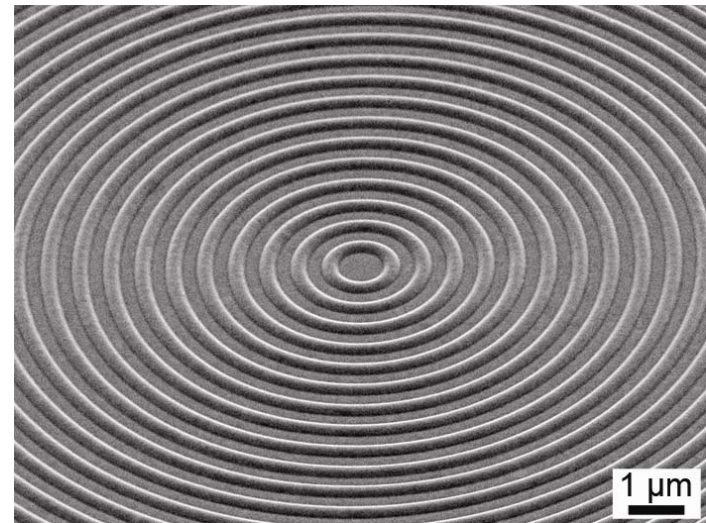
● DESCRIPTION OF WORK

- ◆ Surface roughness major problem in plasmonics
- ◆ Developed simple strategy for ultrasmooth patterned silver films
- ◆ Uses template stripping to make multiple copies of same structure from a pre-patterned substrate



● MAJOR OBSERVATIONS

- ◆ Enables various patterned plasmonic structures
- ◆ Measured propagation length of plasmons as expected from theory for first time
- ◆ Ultrasharp tips obtained for nanofocusing of light



● Publications

- ◆ Nagpal, Lindquist, Oh, and Norris, *Science* **325**, 597 (2009).
- ◆ Lindquist, Nagpal, Lesuffleur, Norris, and Oh, *Nano Lett.* (in press).