**Tailoring the Glow of Nanostructured Metals**

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NNIN Facility utilized: Characterization Facility

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**DESCRIPTION OF WORK**
- Nanostructuring tungsten films
- Modify thermal emission spectrum
- Useful emitters for thermophotovoltaics
- Absorbs and re-emits into InGaAsSb photovoltaic cell

**MAJOR OBSERVATIONS**
- Fabricated tungsten and molybdenum “woodpiles”
- Measured thermal emission at 600°C
- Estimated thermal-to-electrical conversion, 32%

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**Publications**

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Top view of tungsten woodpile structure

Nanostructured Metal  Photovoltaic Cell