

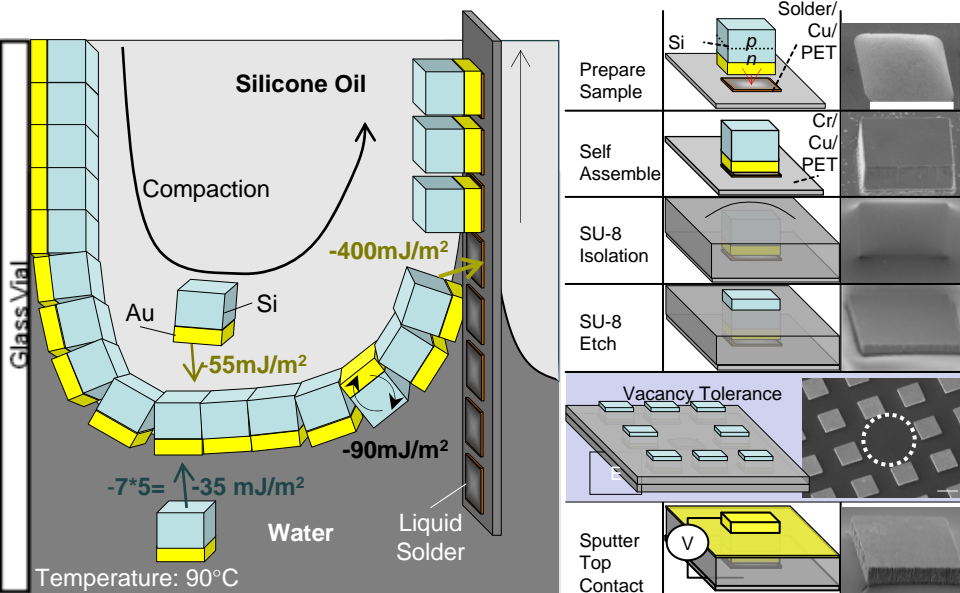
Self-Assembly of Microscopic Chipllets at a Liquid-Liquid-Solid Interface Forming a Flexible Segmented Monocrystalline Solar Cell

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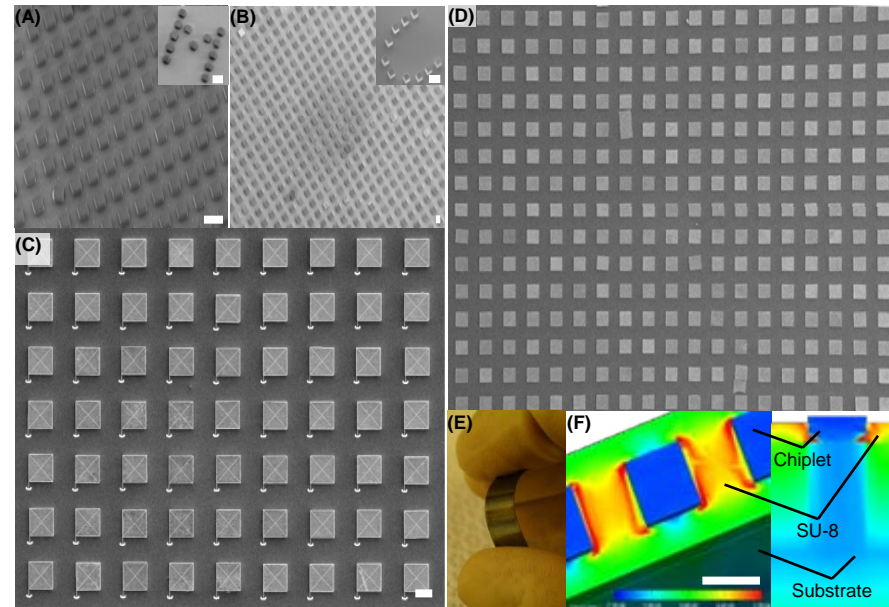
DESCRIPTION OF WORK

- ◆ Self assembly and integration of active semiconductor chipllets on flexible substrates
- ◆ Integration strategy to combine monocrystalline Si solar cells into a flexible, fault tolerant solar module



MAJOR OBSERVATIONS

- ◆ Very small active components can be preoriented and assembled at arbitrary locations from a silicone oil - water interface
- ◆ Flexible, monocrystalline solar cell was fabricated



Publications

- ◆ Robert J. Knuesel and Heiko O. Jacobs, Proc. Nat. Acad. Sci. (2010).
- ◆ Robert J. Knuesel and Heiko O. Jacobs, Mater. Res. Soc. Symp. Proc. (2009).