

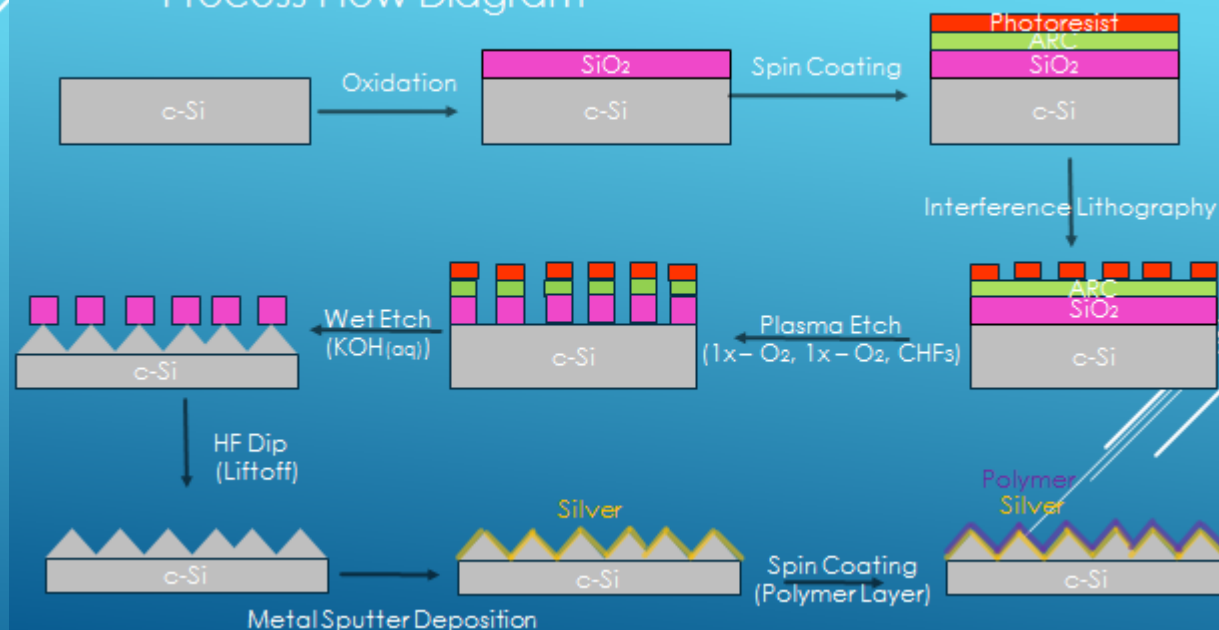
MANIPULATING SYMMETRY IN LIGHT-TRAPPING NANOSTRUCTURES TO ENHANCE ORGANIC SOLAR CELL EFFICIENCY

by Chris Hirani

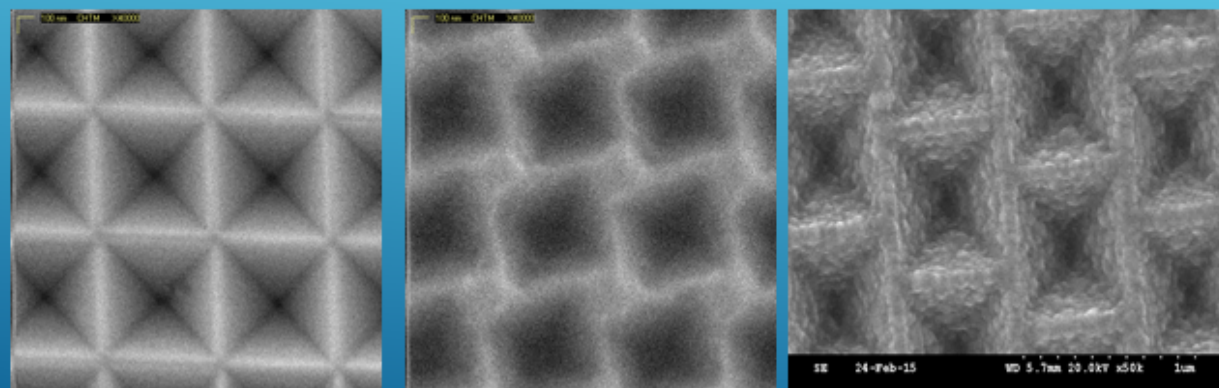
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Process Flow Diagram



3 DIFFERENT SYMMETRIES GENERATED



C_{4v}

C₄

RESULTS

- Periodic nano-structure arrays increase overall light absorption in the visible spectrum
- These arrays also extend the absorption spectrum window by ~60 nm
- Absorption is increased in the structures C_{4v}, C₄, and C₂, by 75%, 102%, and 82% respectively (2)

