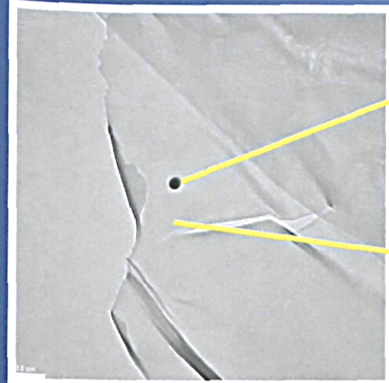
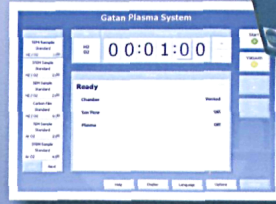


ADVANCED PLASMA CLEANING SYSTEM

Model 950

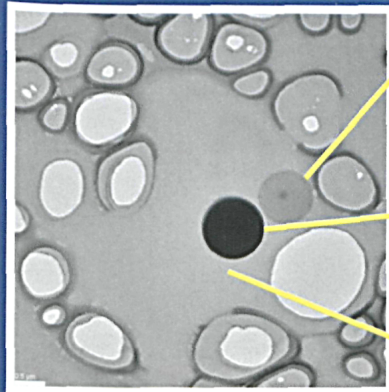
SOLARUS™



1 min exposure before cleaning (1µm high contamination cone)

10 min exposure after 30 sec cleaning

Si sample showing cleaning efficiency. Test: Contaminate sample (1 drop of oil in 50 ml acetone); 1. Expose 1 min; 2. Clean 30 - 60 sec; 3. Expose 10 min.

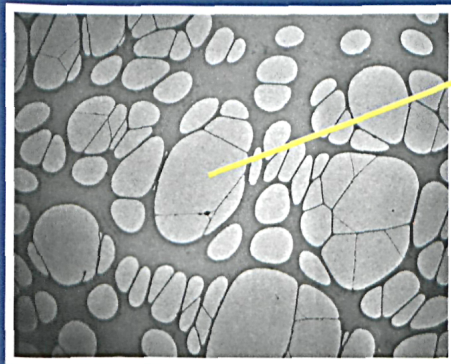


20 sec exposure before cleaning

1 min exposure before cleaning

10 min exposure after 30 sec H₂/O₂ clean

Holey Carbon Film Sample contaminated with 1 drop of oil in 50 ml acetone.



Lacey Carbon "Hole" (6 months old off the shelf).

SOLARUS: No changes after 100sec. H₂/O₂ cleaning. Competition: Lacey structure was completely destroyed in less than 30 sec.

A NEW GENERATION PLASMA SYSTEM

INTERACTIVE TOUCHSCREEN OPERATION

FASTER CYCLE TIMES AND CLEANING RATES

FULL CONTROL OF ALL PROCESS PARAMETERS

- TIME •
- POWER (10W - 50W) •
- GAS MIX •

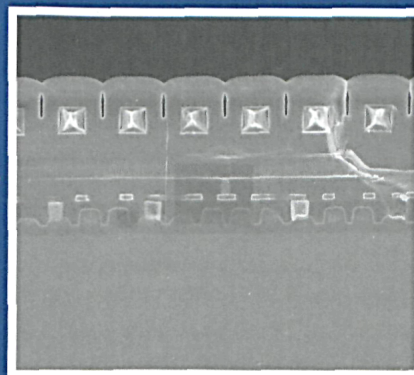
SUPPORTS 3 INDEPENDENT PROCESS GASES

- HYDROGEN •
- OXYGEN •
- ARGON •

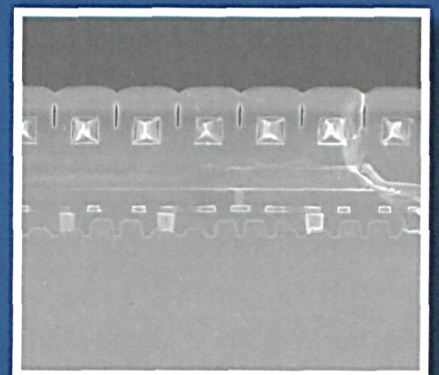
TWO FRONT LOADING TEM PORTS

TOP LOADING CHAMBER PORT

SPEED - EFFICIENCY - REPEATABILITY



Contaminated semiconductor sample showing scan window.



After 10min H₂/O₂ cleaning with SOLARUS all contamination removed with no apparent Si damage.

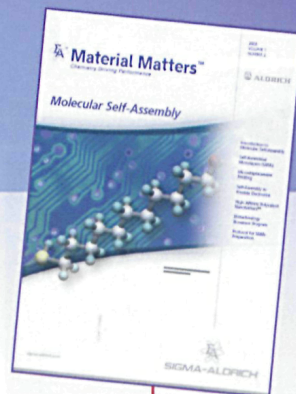


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MEMBRANES FOR HYDROGEN PURIFICATION: AN IMPORTANT STEP TOWARD A HYDROGEN-BASED ECONOMY

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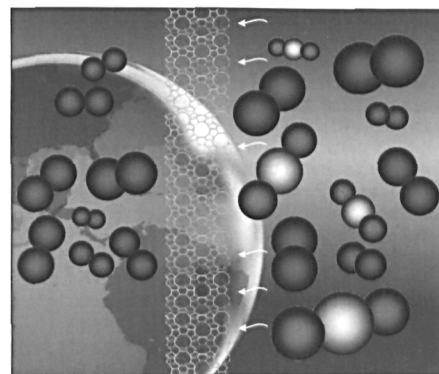
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ON THE COVER: Membranes for Hydrogen Purification: An Important Step toward a Hydrogen-Based Economy. Obtaining pure hydrogen requires separating it from other gaseous compounds—mainly CO₂—that often accompany it in industrial chemical reactions. Advanced membrane technology may prove to be the key to the successful, economical production of molecular hydrogen, thus helping to realize the proposed “hydrogen economy.” Shown on the cover is an artistic representation of the separation of hydrogen (green) from CO₂ (red and white) molecules by means of an advanced membrane (not drawn to scale). See the technical theme that begins on p. 735.

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