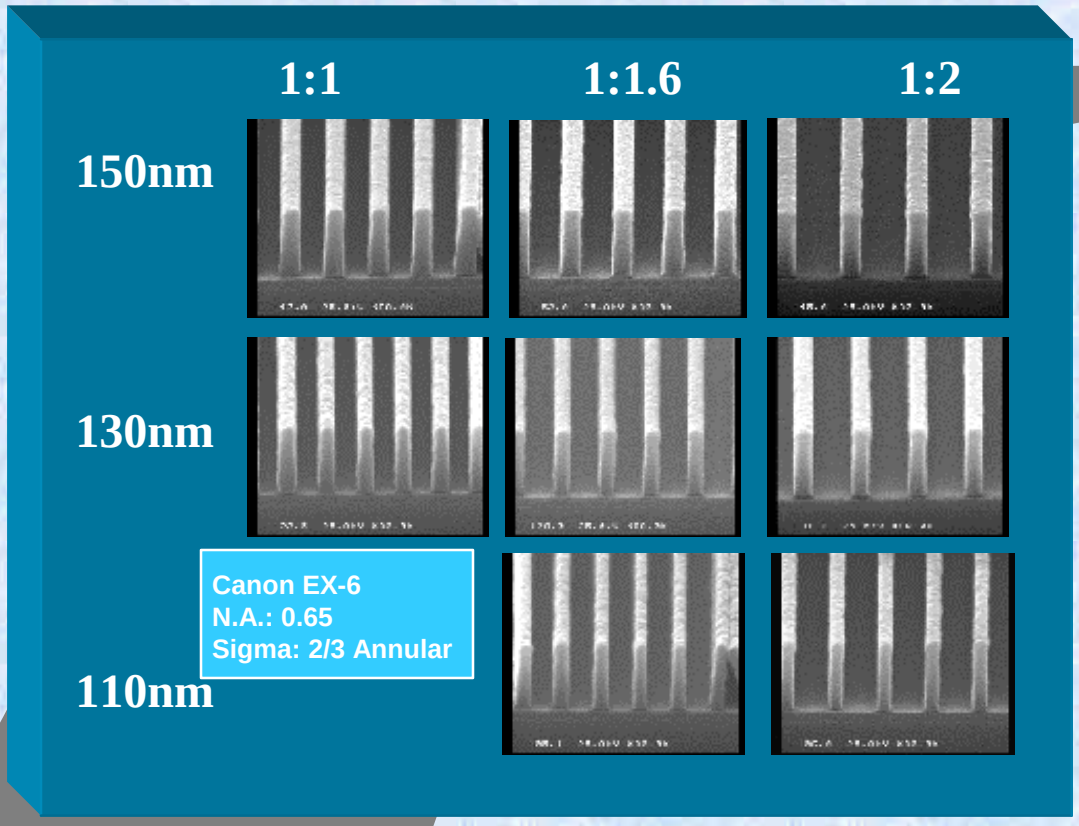
GKR5104

248nm Deep UV High resolution Photoresist

CD Versus Pitch



Features

- Superior performance on multiple substrates
- Excellent performance for lines and spaces aw well as contact holes
- Superior etch resistance
- Useful for varying pitches 1:1 to fully isolated

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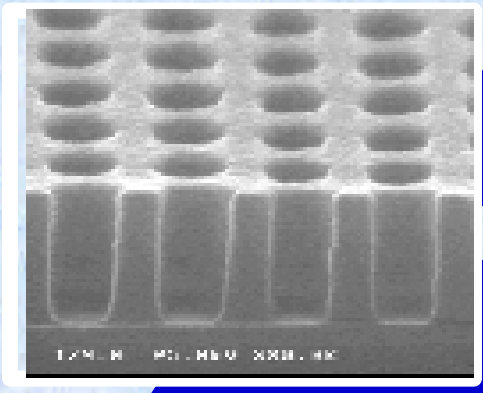
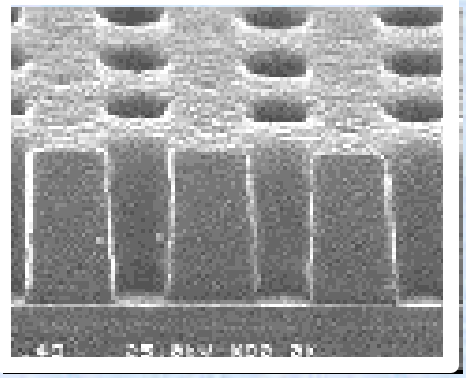
GKR 5303

248nm Positive Tone Photoresist for contact holes

0.18µm Dense CH w/ annular illumination



220nm Dense CH biased to 150nm w/HTPSM



- **Useful with HTPSM as well as binary mask**
- **Minimized Proximity bias for different pitches.**
- **Excellent resistance to side lob printing when used with HTPSM**
- **Good dry etch resistance**

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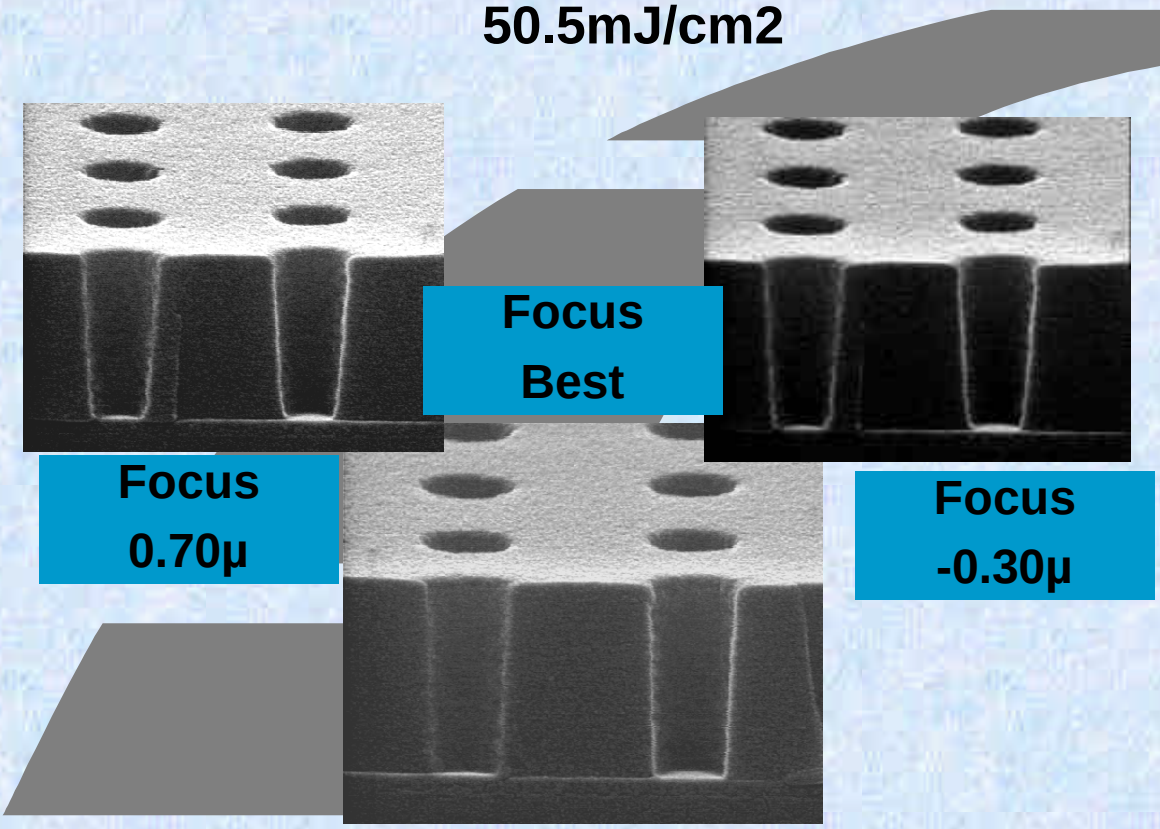
ARCH 8250

248nm Positive Tone resist for contact hole application

0.25µm Contact Hole Application
50.5mJ/cm2



Substrate:	**Silicon+ 500Å DUV32**
Resist Thickness:	**0.78µm**
Soft Bake:	**120°C/60”**
Exposure Tool:	**ISI-7800**
NA/Sigma:	**0.53/0.74**
Post Exposure Bake:	**115°C/60”**
Develop:	**5”stream/60”puddle OPD4262**

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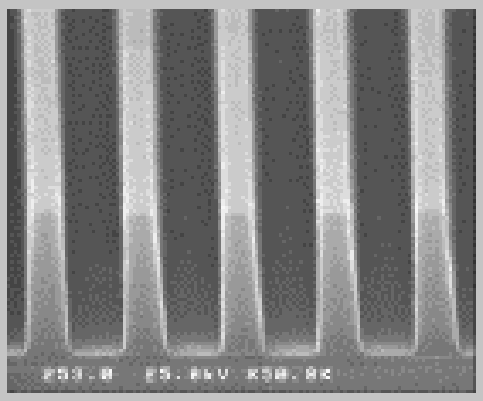
ARCH 8250

248nm Positive Tone resist for dense line application

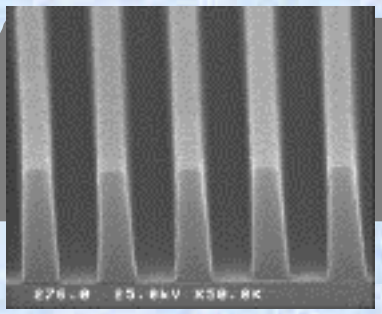
0.25µm L/S 16.0mJ/cm2



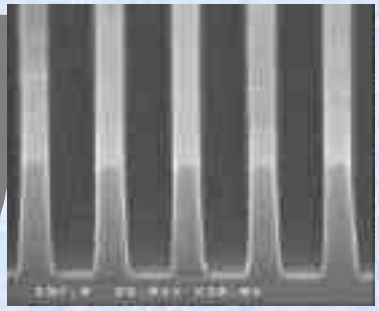
RT=7800Ä
550Ä DUV32
0.53NA 0.74 Sigma

- **Resolution to 0.20µm with conventional illumination**
- **Superior etch resistance**
- **Compatible with organic ARC's**
- **Suitable for multiple Applications**

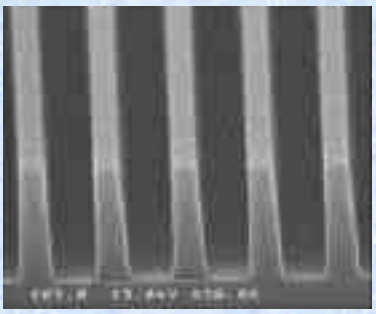
Dose Latitude 0.25µm L/S



14.5mJ/cm2



15.5mJ/cm2



16.5mJ/cm2

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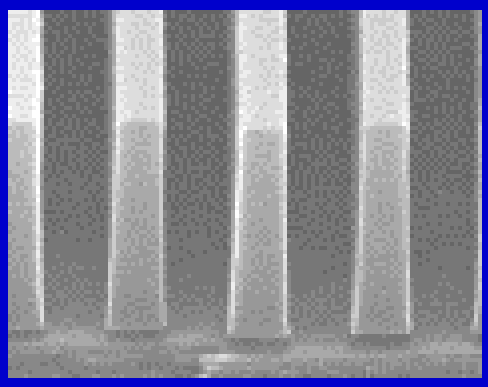
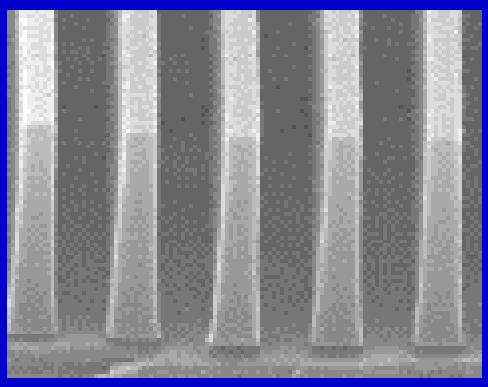
ARCH 8250

248nm Positive Tone resist for metal layers

Dose to Size for 0.25µm l/s 18mJ/cm2



0.30µm l/s



0.25µm l/s

- 20% Exposure latitude for 0.25µm l/s on TiN
- Superior etch resistance
- Compatible with inorganic ARC's
- Suitable for multiple Applications

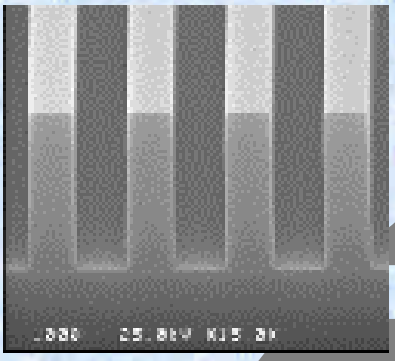
ARCH™

GKR4401

248nm Positive Tone Thick Film Photoresist

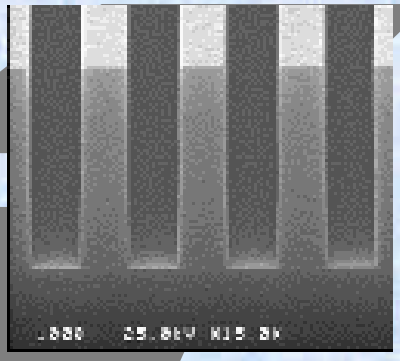
1.0µm lines and spaces

3.0µm Film



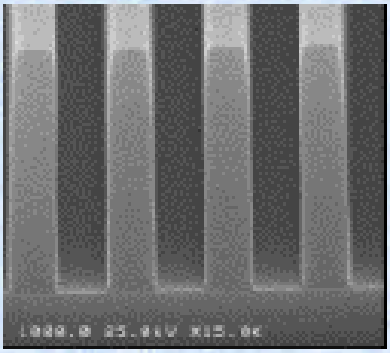
21mJ/cm2

4.0µm Film



27mJ/cm2

5.0µm Film



36mJ/cm2

- **Useful operating thickness ranging from 3 to 5 microns**
- **45% Exposure latitude for 1.0µm Lines in a 3 µm film.**
- **Designed for Implant application.**
- **Thermal deformation temperatures in excess of 125°C**

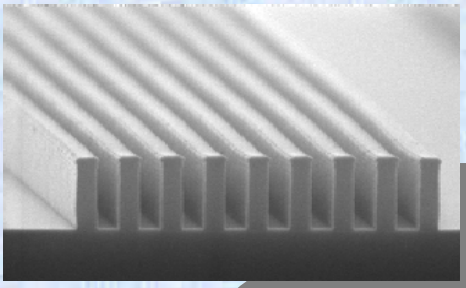
ARCH™

GKR 4502

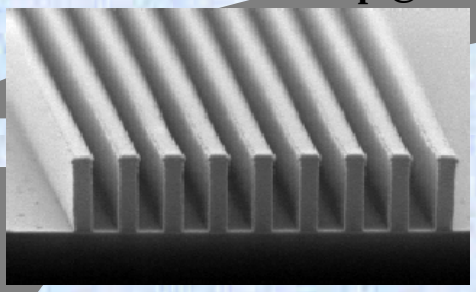
248nm Positive Tone resist for reflective substrate

HF etch compatibility 0.25µm L/S

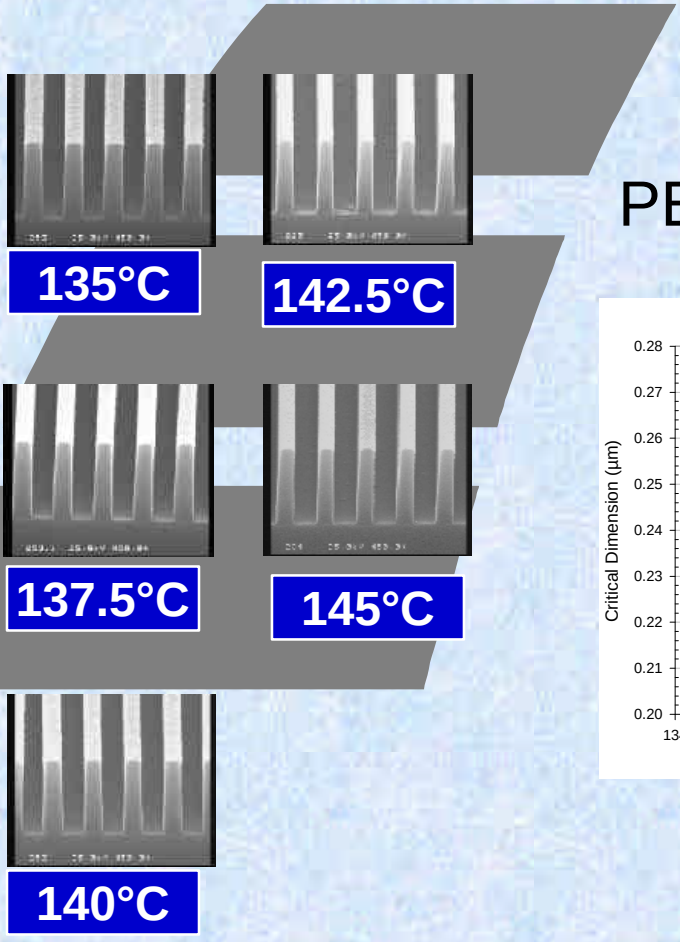
No treatment



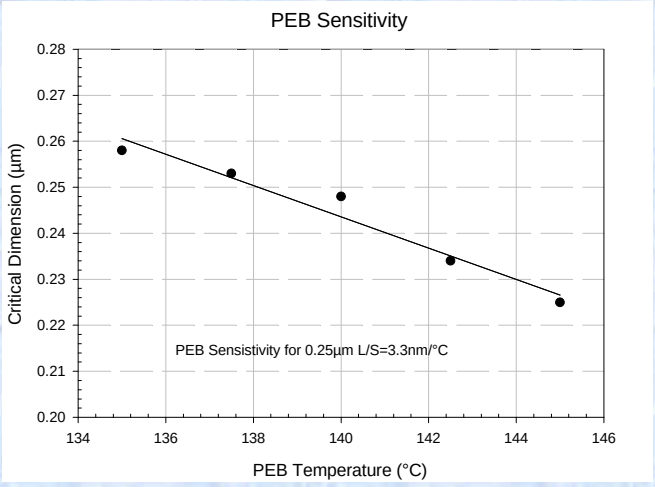
2.5 minutes HF* dip @ 50°C



***Buffered HF @ 50:1 water/HF**



PEB Sensitivity



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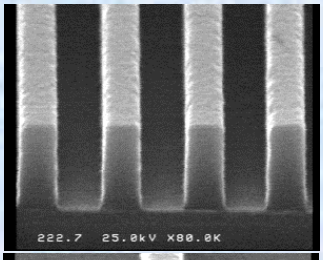
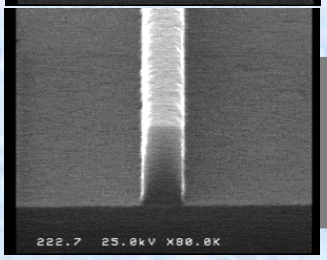
GKR 5102

Conventional Illumination

0.22µm Lines

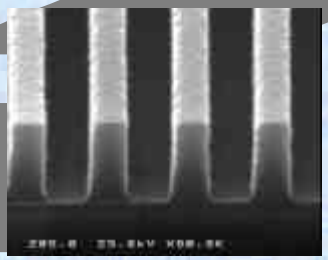


29mJ/cm2



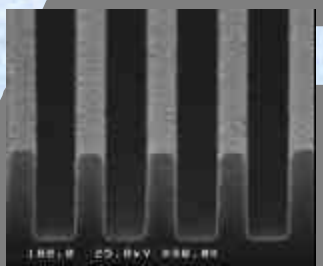
29 mJ/cm2

0.20µm Lines



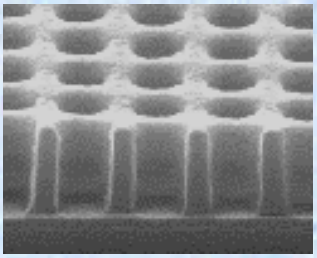
29mJ/cm2

Annular Illumination
0.18µm Features



31mJ/cm2

26mJ/cm2



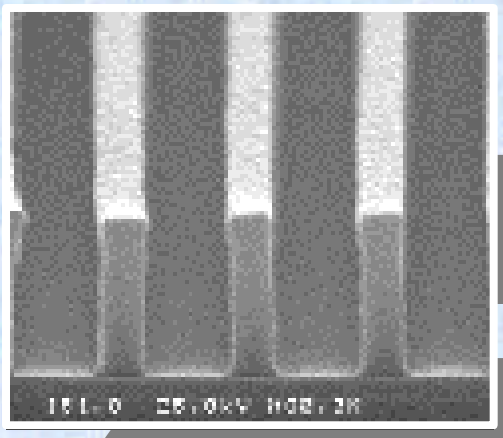
66mJ/cm2

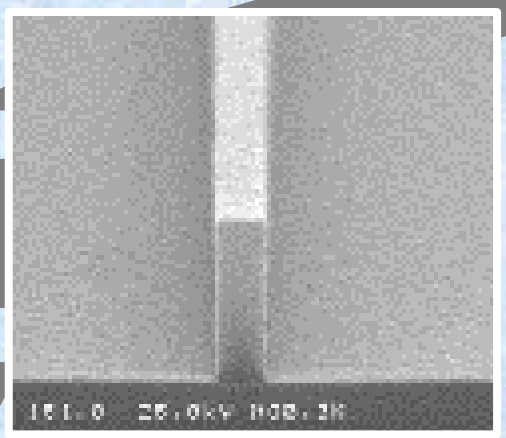
ARCH™

GKR 5204

248nm Positive Tone resist for isolated and semi-dense lines

150nm lines @ 22mJ/cm2
Zero Proximity Bias





- Greater than 10% Exposure Latitude for 150nm Isolated and 1:1.6 pitch Lines and spaces.
- Compatible with DUV30 and DUV42 BARC's.
- Compatible with inorganic ARC's.
- 0.6-0.7µm overlapping Depth of Focus between semi-dense and Isolated lines.

ARCH™