



**Everlight
Chemical**

Better Chemistry Better Life



EPI 620 series Technical Data

2012/2/29



Evaluation Result

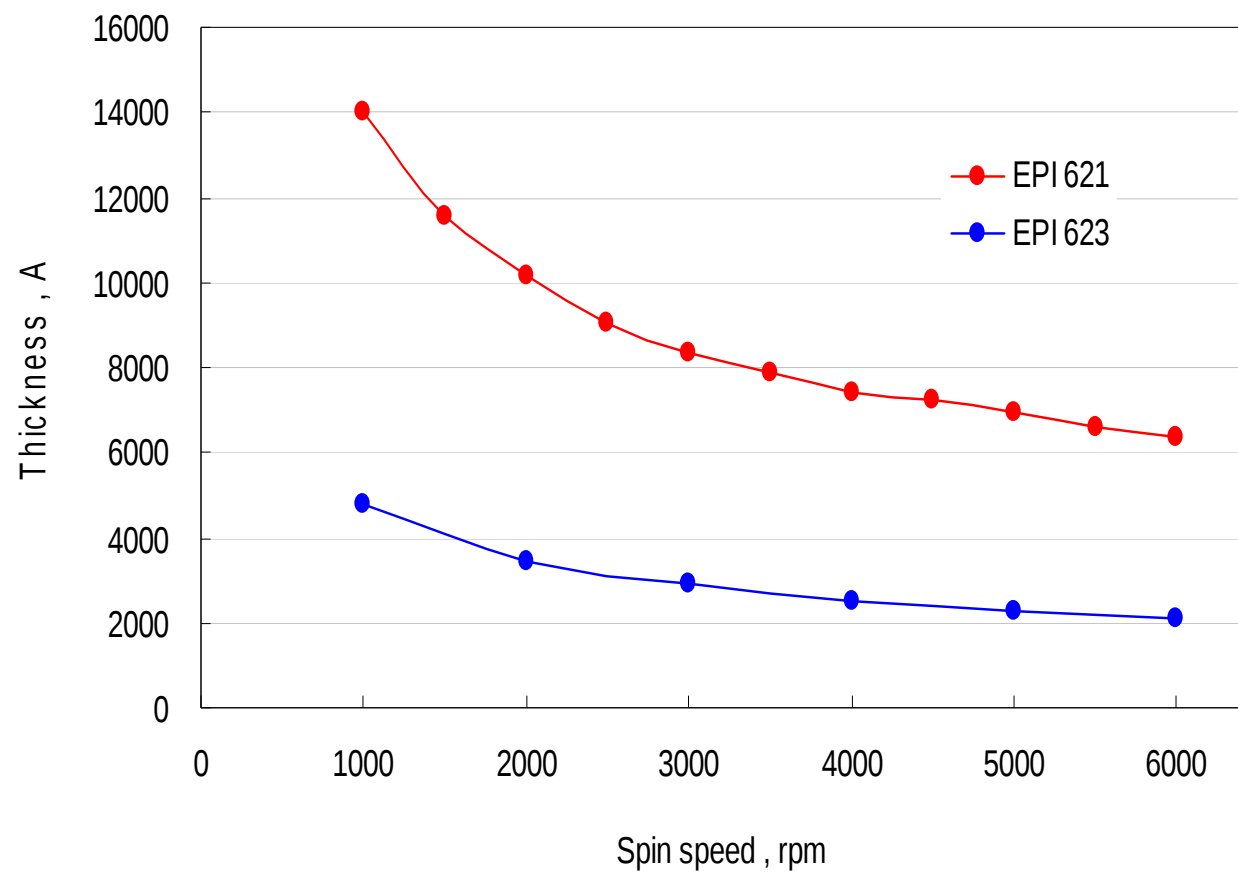
Photoresist	Sensitivity		Dark Erosion (Å)	Resolution (um)	Uniformity Range (Å)
	Eth (mJ/cm ²)	Eop			
EPI 620 series	231	480	302	0.35	< ±50

(Eop Based on 0.5um L/S)

Condition

Substrate : Bare Si(pretreatment with HMDS)
 Thickness : 0.77 um
 Prebake : 90°C/60sec(hot plate)
 Exposure : Nikon i7a(N.A=0.50)
 PEB : 110°C/60sec(hot plate)
 Development : EPD 1000 Puddle 60sec.23°C

Spin Curve



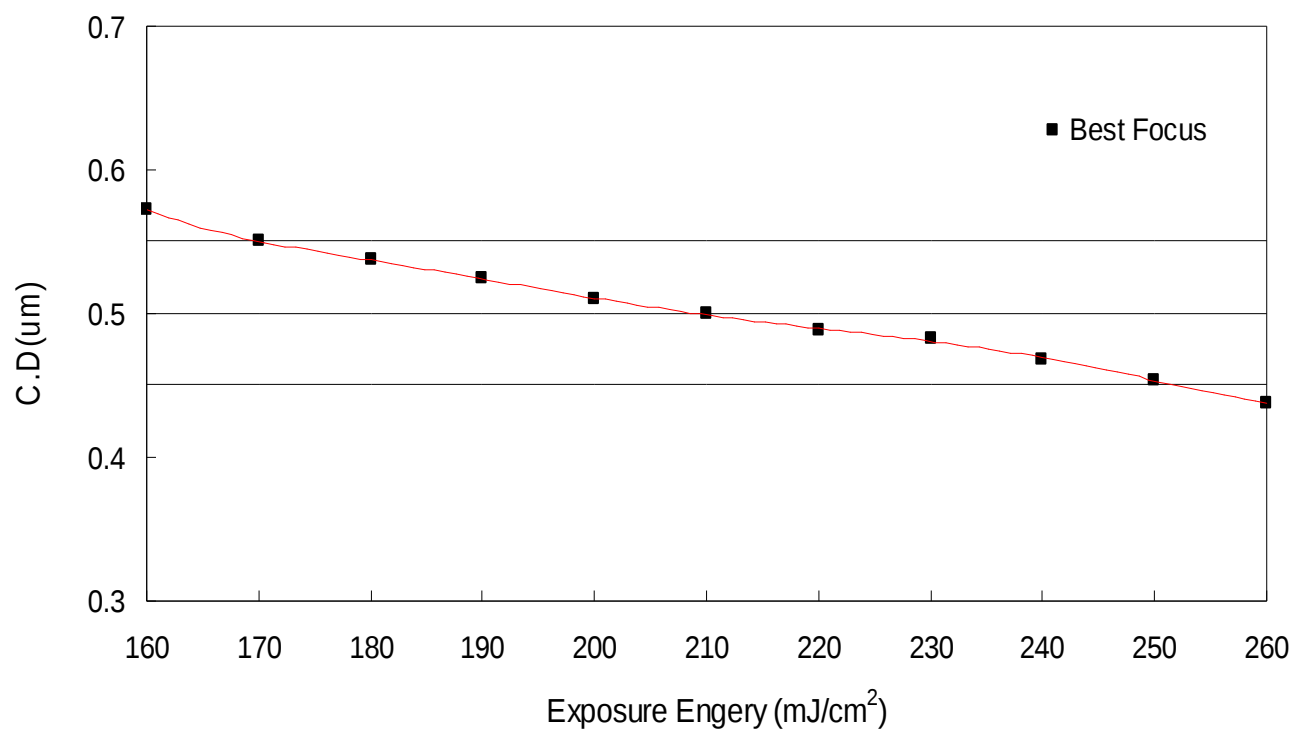
Swing Curve



Exposure Latitude

TK.=1.08um

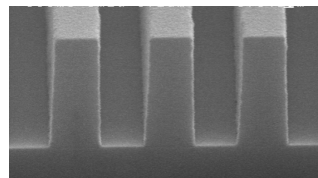
0.5um L/S



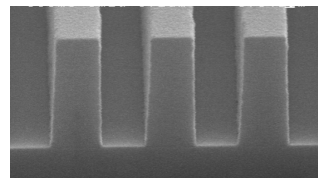
Exposure Latitude

TK.=1.08um

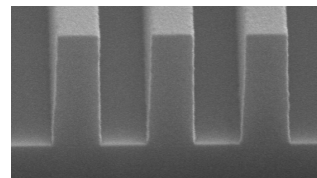
0.5um L/S



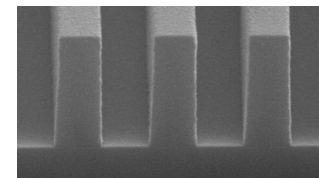
170mj/cm²



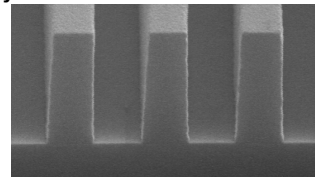
180mj/cm²



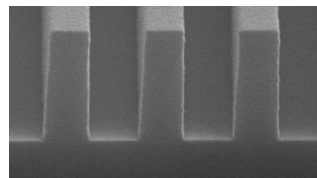
190mj/cm²



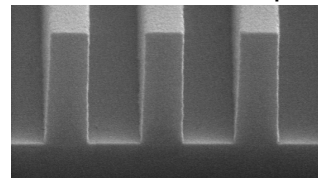
200mj/cm²



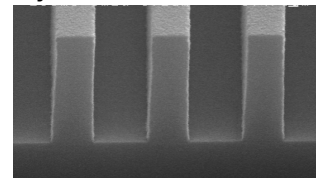
Eop=210mj/cm²



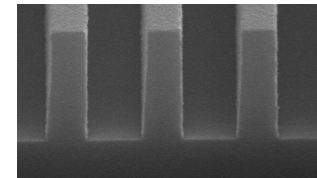
220mj/cm²



230mj/cm²



240mj/cm²

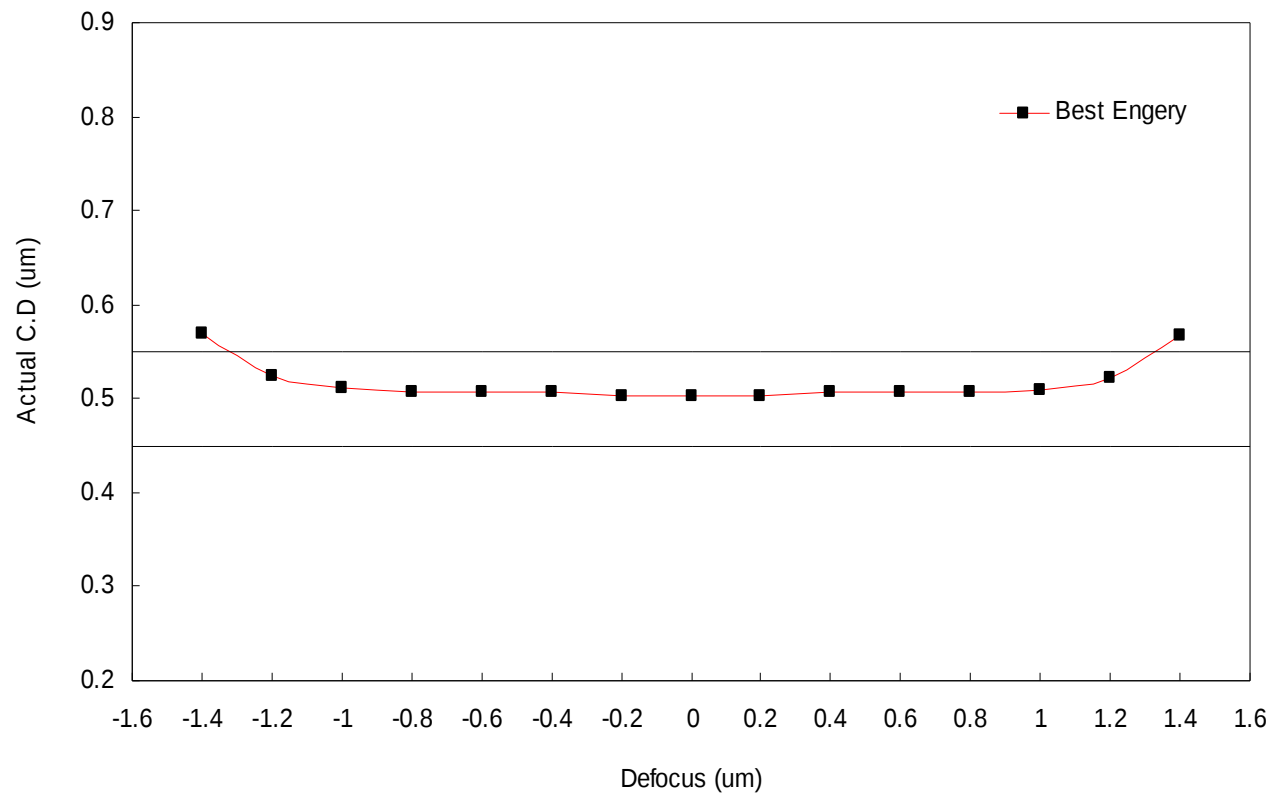


250mj/cm²

Focus Latitude

TK.=1.08um 0.5um L/S

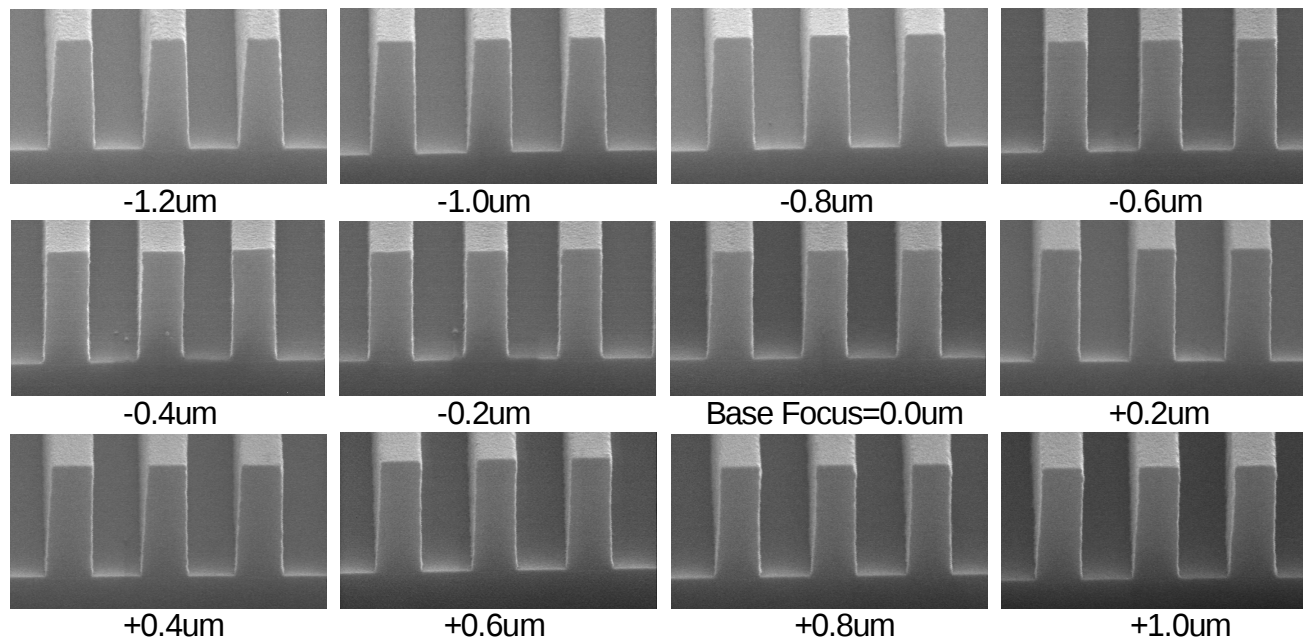
Exposure=210 mj/cm²



Focus Latitude

TK.=1.08um 0.5um L/S

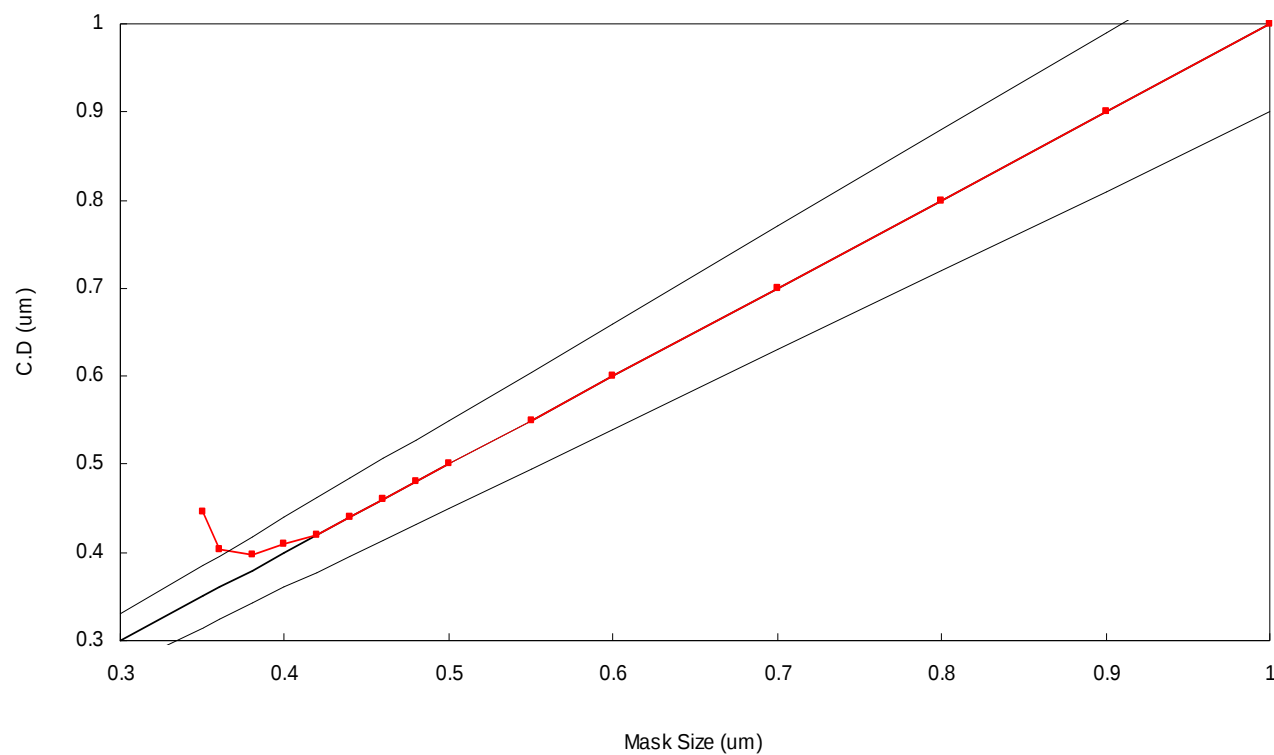
Exposure=210 mj/cm²



C.D Linearity

TK.=1.08um

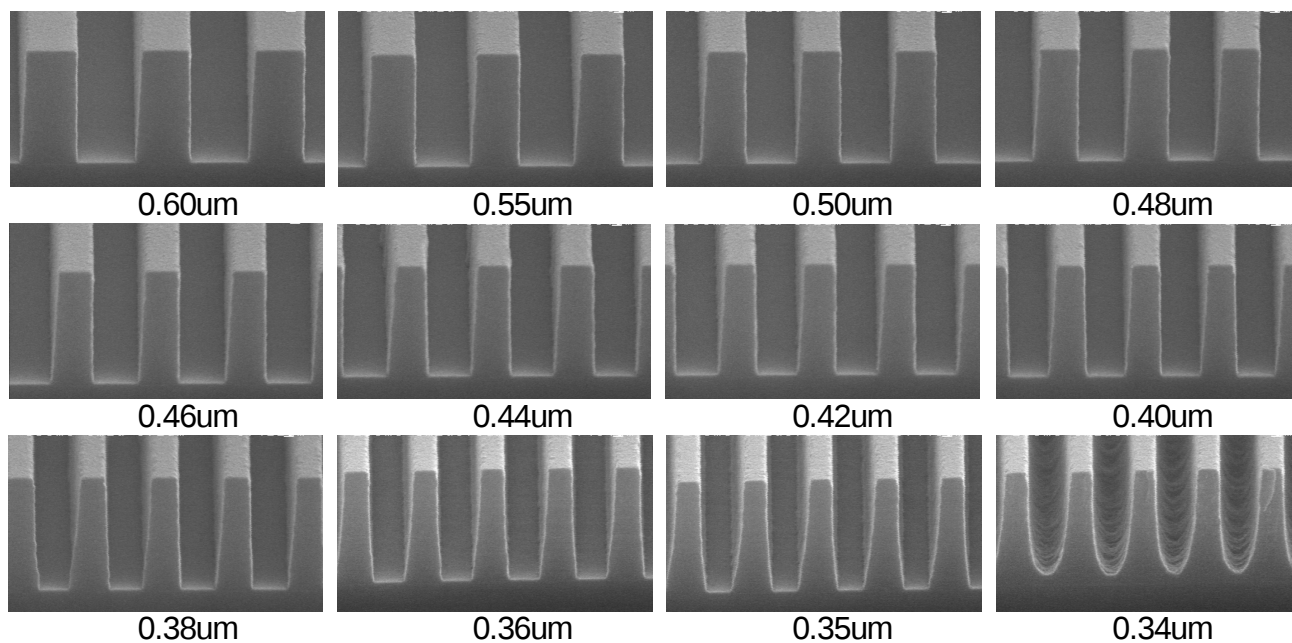
Exposure=210 mj/cm²



Resolution

TK.=1.08um

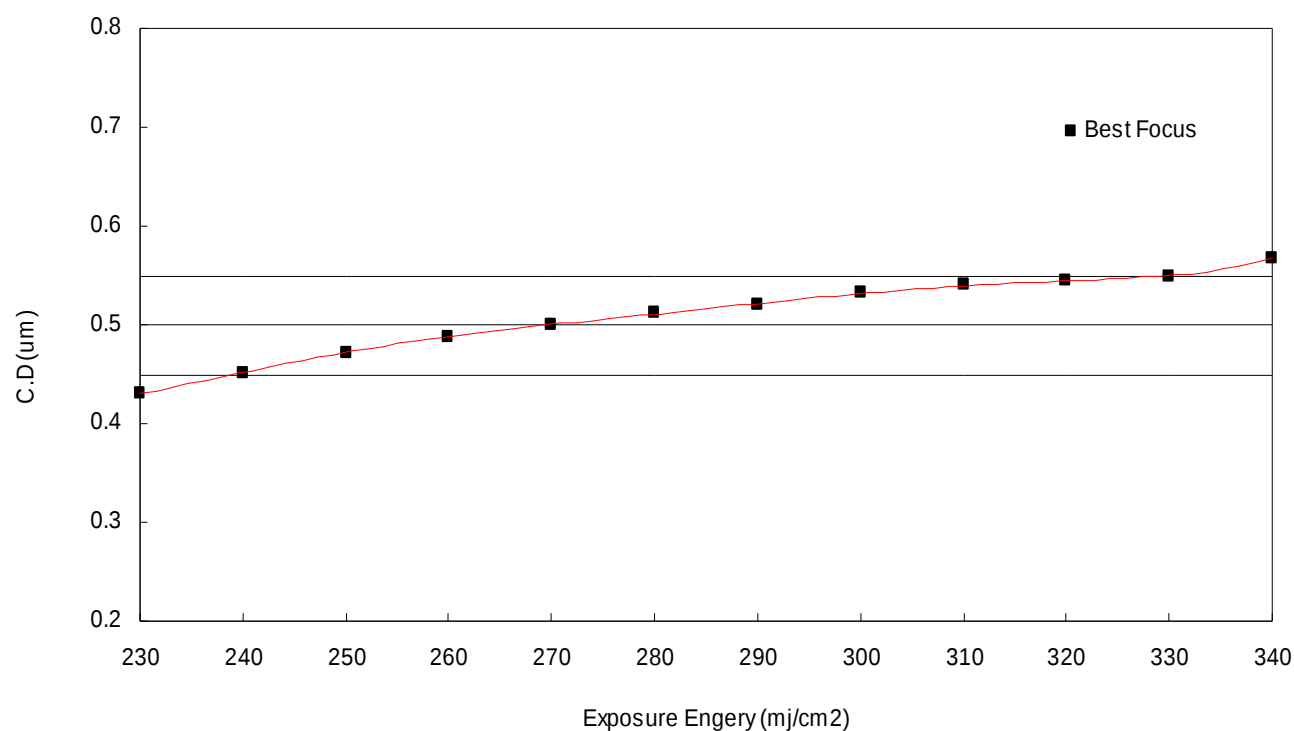
Exposure=210 mj/cm²



Exposure Latitude for Contact Hole

TK.=1.08um

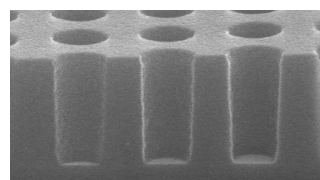
0.5um Hole



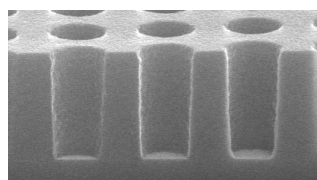
Exposure Latitude for Contact Hole

TK.=1.08um

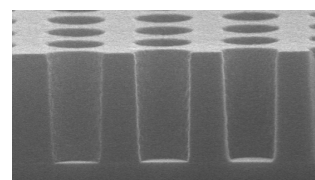
0.5um Hole



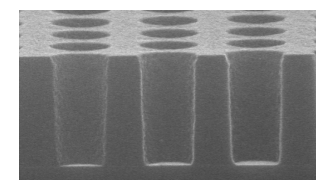
240 mJ/cm²



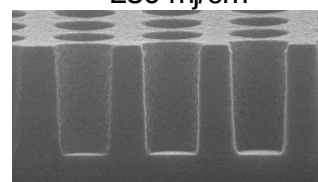
250 mJ/cm²



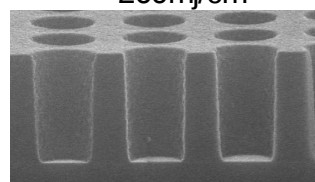
260mJ/cm²



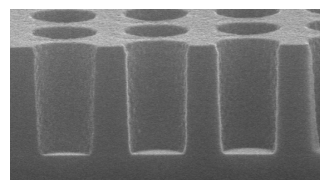
270mJ/cm²



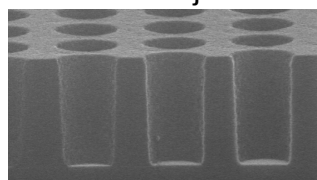
280 mJ/cm²



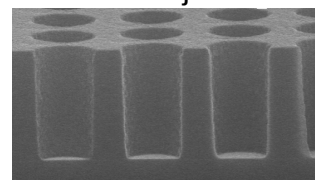
290 mJ/cm²



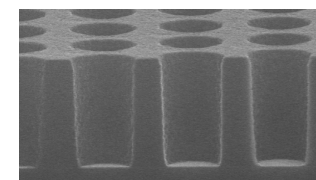
300 mJ/cm²



310 mJ/cm²



320mJ/cm²

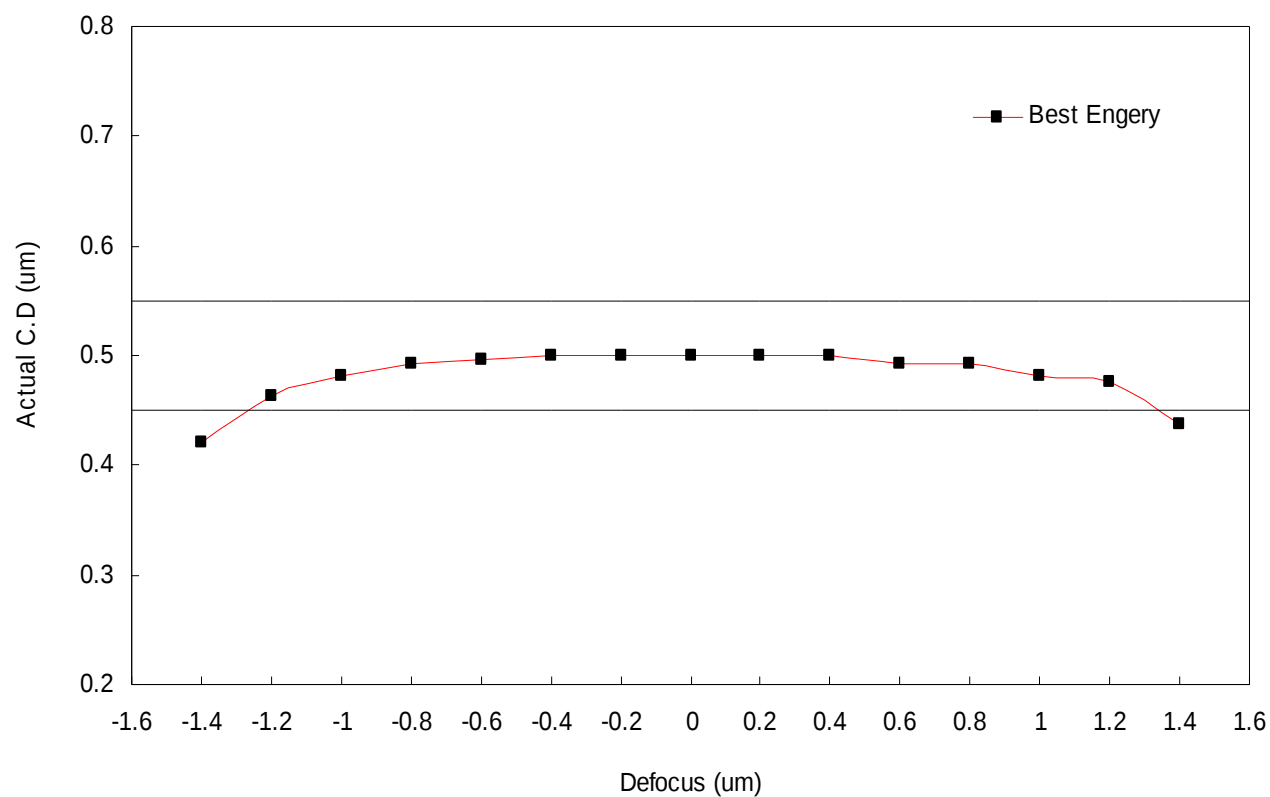


330mJ/cm²

Focus Latitude for Contact Hole

TK.=1.08um 0.5um Hole

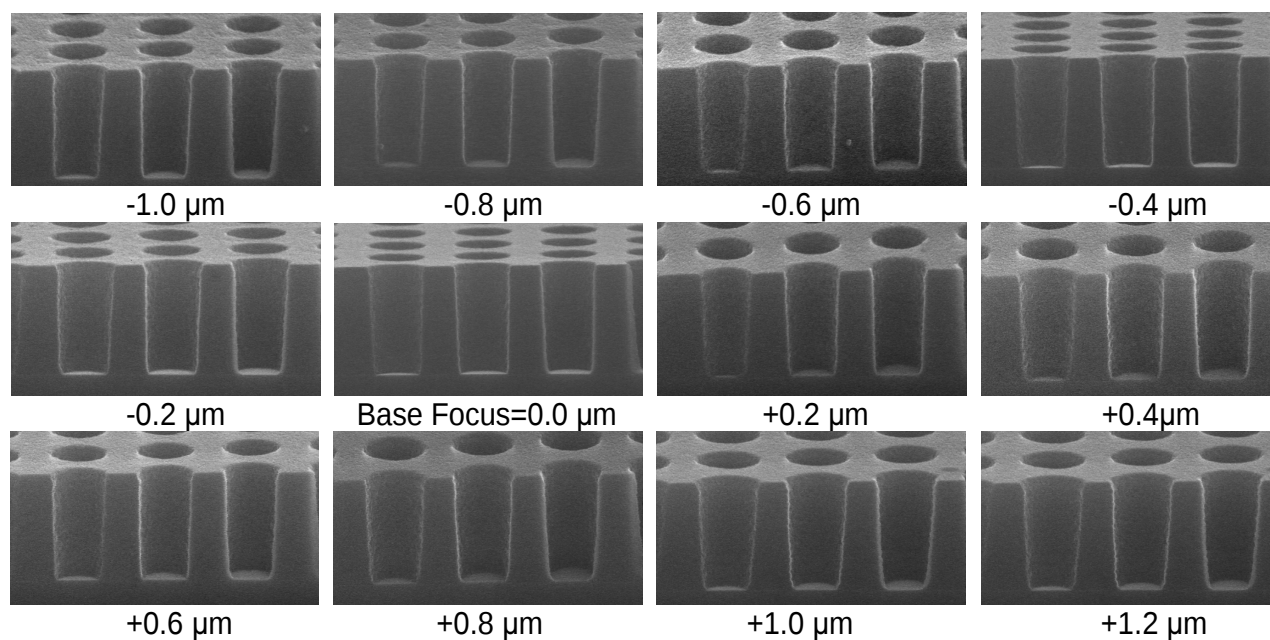
Exposure=270 mj/cm²



Focus Latitude for Contact Hole

TK.=1.08um 0.5um Hole

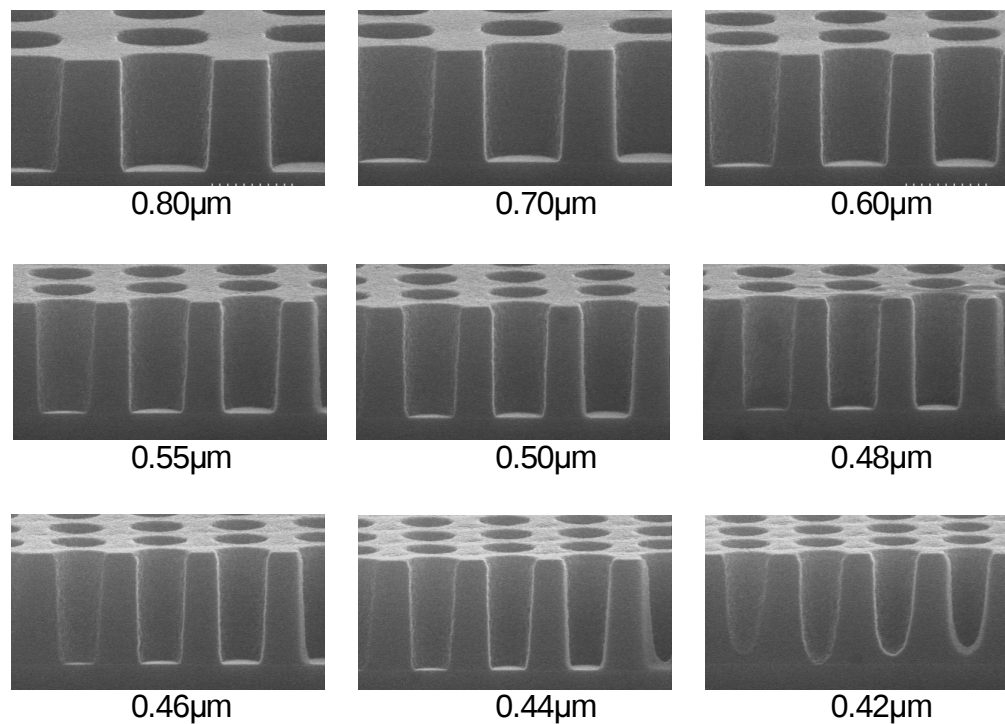
Exposure=270 mj/cm²



Resolution for Contact Hole

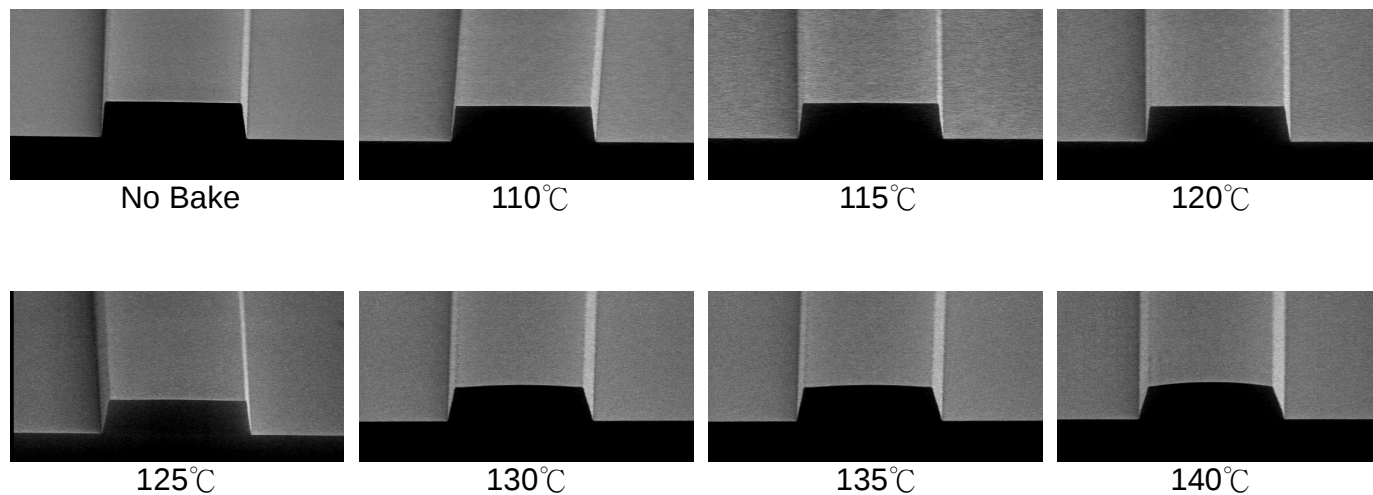
TK.=1.08 μ m

Exposure=270 mj/cm²



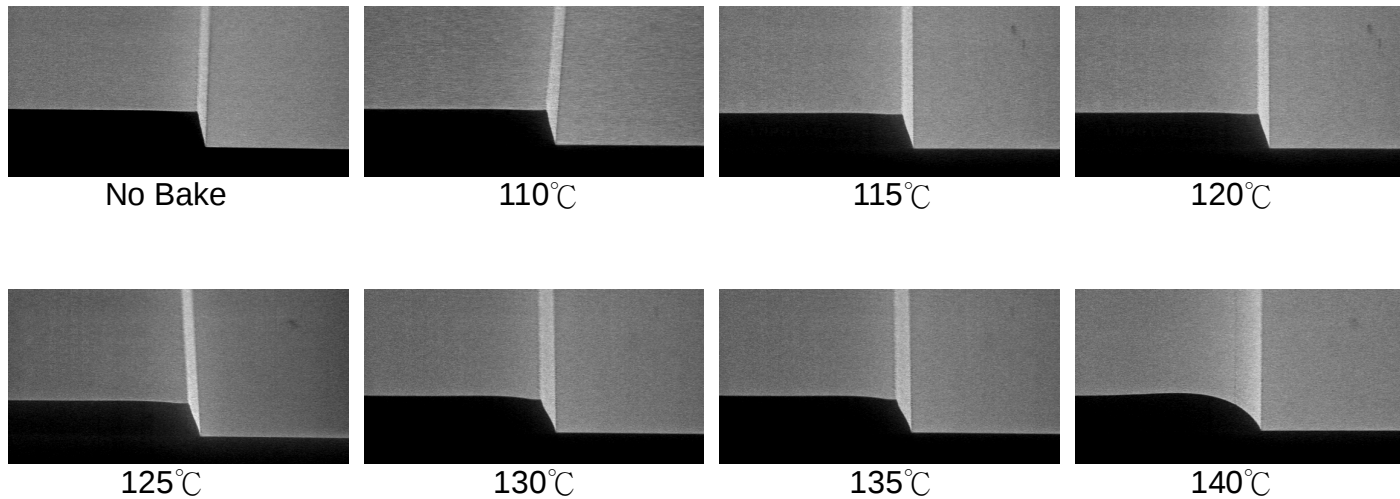
Thermal Resistance

5um Pad



Thermal Resistance

10um Pad





**Thank
YOU**