1.6b Silicon Carbide Deposition (5% SiH₄ in He)

Mode: PECVD
Pumps: Mechanical/Blower
Susceptor Material: Aluminum
Temperature (°C): 300
Heat Exchanger (°C): 60

Electrode Size: 6" 8" 11"

Gases (sccm):

SiH₄ (5% in He): 300
He: 700
CH₄: 100

Pressure (mTorr): 900
Power (Watts): 50

Typical Deposition Rate (Å/min.): 50

Notes:
The stress is 5x10⁹ dynes/cm² and the film is in compression. The refractive index is 2.5-2.6. If the deposition temperature is lowered, the CH₄/SiH₄ ratio has to be reduced to maintain an index of 2.5 to 2.6.