

Figure 1. a) CVD mode with continuous flow of precursor and reactant gas, b) ALD mode with alternate pulses of precursor, purge and reactant; and c) FAST mode with pulsed injection of reactive species without purges.

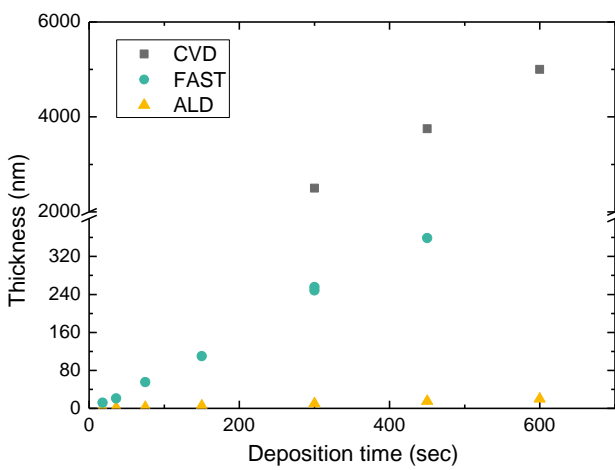


Figure 2. Evolution of silicon oxide layer thickness with deposition time in ALD, CVD and FAST processes.

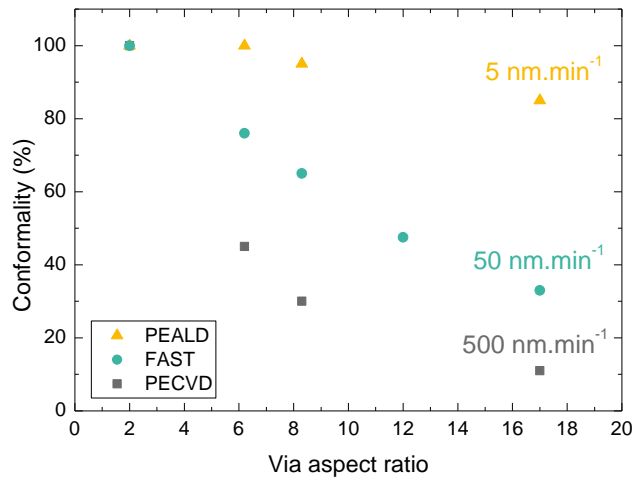


Figure 3. SiO₂ layer conformality evolution with via aspect ratio increase depending on the deposition mode.

	ALD	FAST	CVD
Conformality	+++	++	-
Deposition rate	-	+	++
Minimum deposition temperature	++	++	-
Film properties	++	++	+

Figure 4. Pro and cons of the ALD, CVD and FAST deposition modes.

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