VI MOCVD

Metal organic CVD is used to grow high quality III-V compound semiconductor films.

• Thickness nearly atomically abrupt.
• Requires large amounts of toxic gas.

Ga source is trimethylgallium \((\text{Ga(CH}_3)_3)\)
As source is \(\text{AsH}_3\)

\[ \Rightarrow \text{GaAs} + \text{H}_2 + \text{methane} \]

• Carbon contamination is a problem.

![Graph showing substrate temperature vs. GaAs growth rate](image-url)