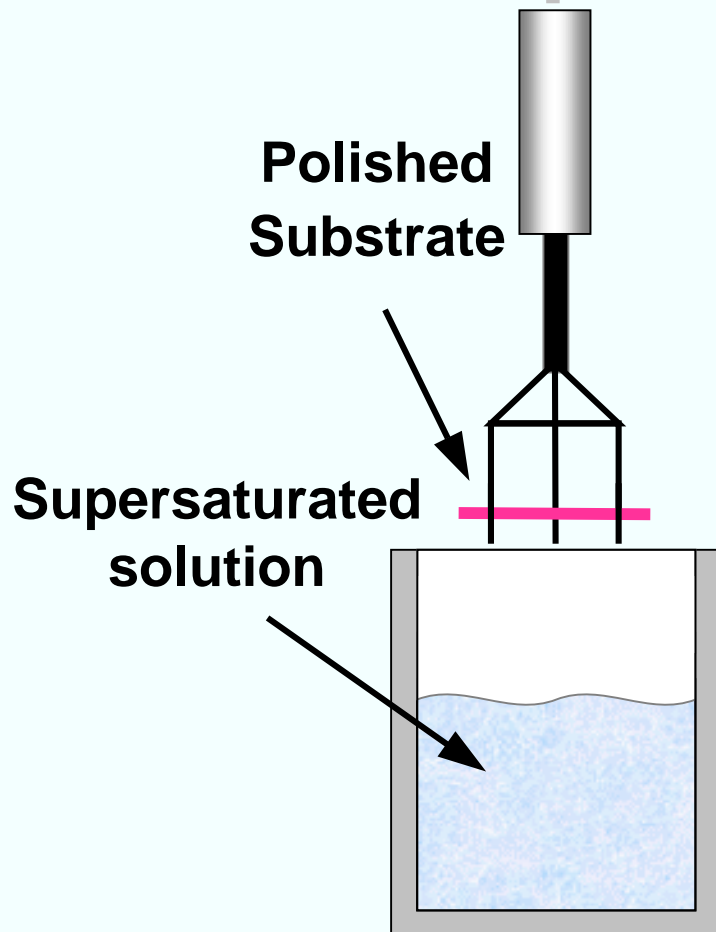




LPE: Liquid Phase Epitaxy Growth



- Advantages:
 - Higher dopant concentrations
 - Czochralski limit ~ 1.5% Nd.
 - LPE demonstrated > 5% Nd.
 - Monolithic growth
 - Low defect occurrence
- Thickness Challenge
 - LPE Designed for 3 to 30 μ m films
 - Magneto Optics, Bubble memory.
 - Laser devices need > 3000 μ m.
- Melt Stability
 - 3 μ films took ~ 5 minutes.
 - 3000 μ m films take 1-2 weeks.