

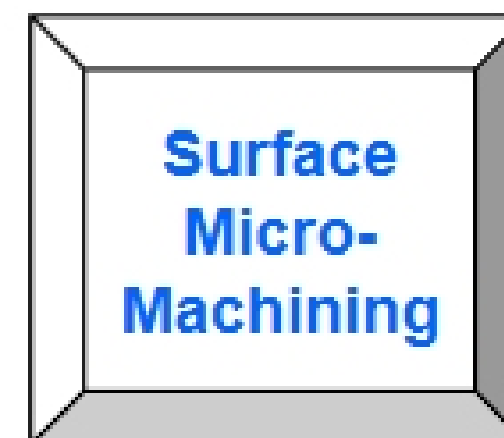
Fabrication Technology, Part II

- Agenda:
 - ↗ Surface micromachining
 - ↗ Wafer bonding
 - ↗ LIGA

- Reading: Senturia, pp. 57-78.

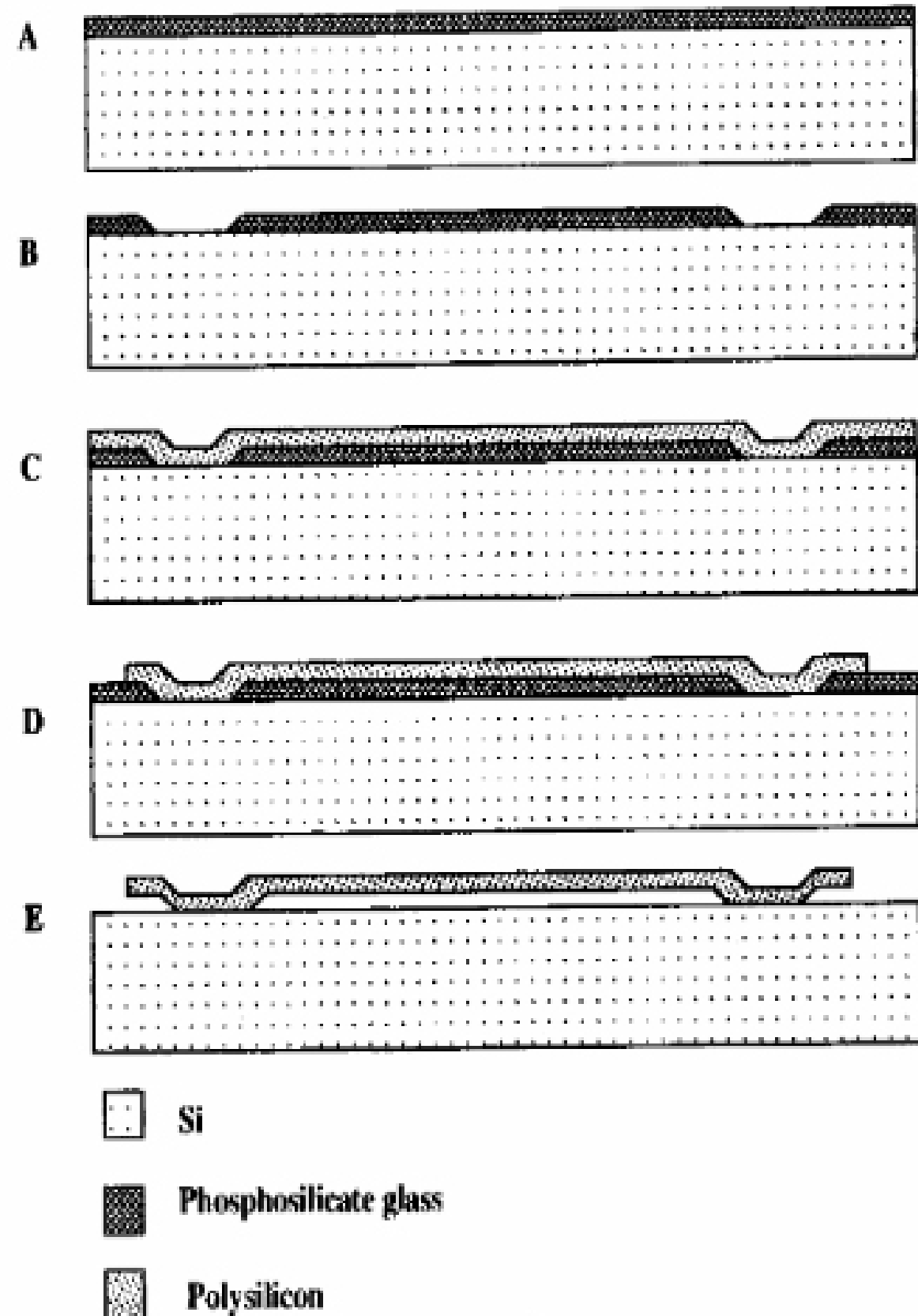
Surface Micromachining

- Overview
- Sacrificial Oxide
- Sealed Cavity
- Variations
- Materials



Basic process sequence

- Begin with substrate
- A. Deposit sacrificial layer
- Also called spacer layer
- B. Pattern holes in sacrificial layer
- Anchor
- C. Deposit structural layer
- D. Modify mechanical properties
via heat treatment
- E. Remove sacrificial layer, or
"release"



Ref. Madou, Fundamentals of Microfabrication,
p. 232.