

Surface Micromachining — a Versatile Technology for Microactuators

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Contents of the Presentation

1. Polysilicon Technology:

Focus on: LPCVD deposition, annealing, dry etching, and releasing of movable structures.

2. Silicon Technology:

Focus on: silicon fusion bonding, KOH-etching, and the combination of bulk and surface micromachining.

3. Electrostatic Actuators:

Focus on: comb actuators, xy-micromanipulators for integrated AFM systems, light modulators, etc.

References

- [1] C. Linder, L. Paratte, M.-A. Grétilat, V.P. Jaecklin, N.F. de Rooij, Surface micromachining, *J. Micromech. Microeng.* **2** (1992), 122–132.
- [2] V.P. Jaecklin, C. Linder, N.F. de Rooij, J.-M. Moret, Micromechanical comb actuators with low driving voltage, *Proc. Actuator '92* (1992), 40–45.