

Investigation into the Role of Focused Ion Beam (FIB) Technology in the Fabrication of MEMS devices

Researcher: Jason Teng

Project description

MEMS devices have been fabricated via the conventional pattern-etch-release route. Due to mask design and production constraints, design-to-test phase can take weeks. The project aims to use FIB microetch and deposition techniques exclusively in the fabrication of microactuators and microrelays. This method allows for a quick turnover in terms of device design and testing.

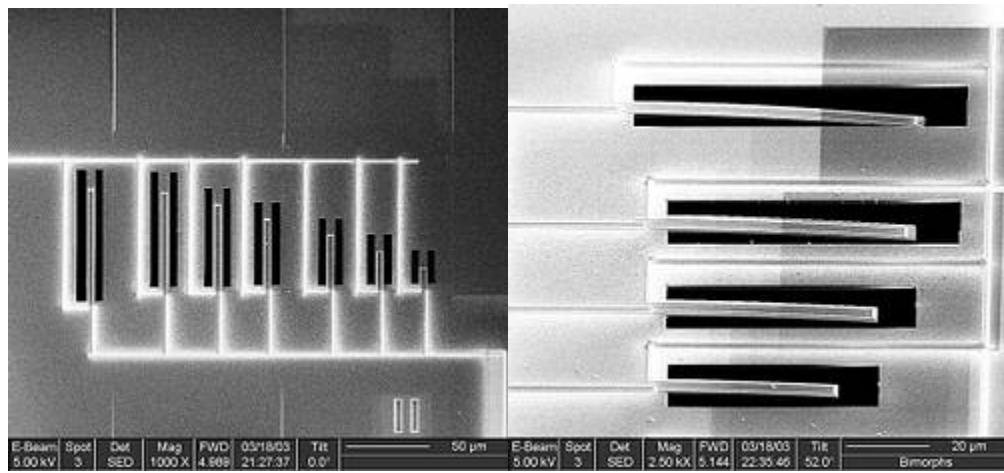


Figure : SEM images of fabricated thermal microactuators

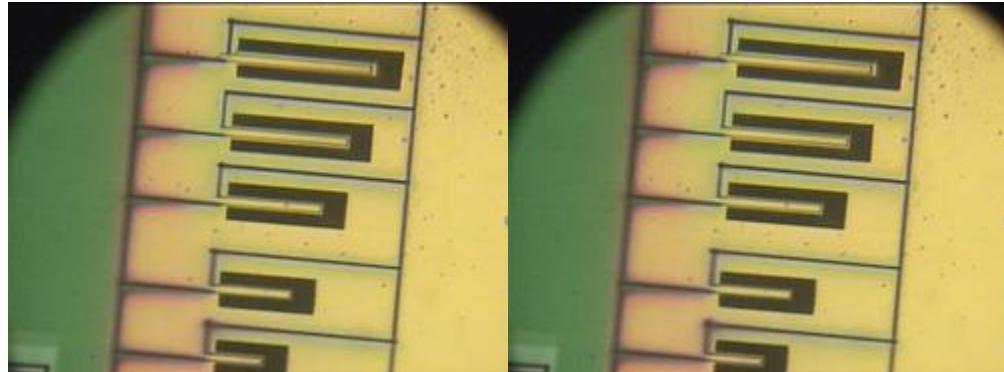


Figure 2: Actuation of thermal bimorph; left side shows unactuated bimorph, right side shows bimorph coming into focus indicating upward deflection