## **Instructor Manual**

## **Foundations of MEMS**

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Chapter 2

Visit <a href="http://www.memscentral.com">http://www.memscentral.com</a>, a companion website of the book for additional teaching materials.

#### **Problem 10: Fabrication**

#### Answer:

Photoresist would dissolve in the wet silicon etchant. According to Table II of [77], the etch rate of KOH on photoresist is greater than 13  $\mu$ m/min, whereas the etch rate on oxide is only 7.7 nm/min.

### **Problem 11: Fabrication**

#### **Answer:**

From step d to e, the silicon nitride can be etched by using plasma etch with photoresist as a mask.

From step g to h, the etchant is unchanged – wet silicon etchants. Candidate wet etchants include EDP, KOH, or TMAH.