Instructor Manual

Foundations of MEMS

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Chapter 2

Visit http://www.memscentral.com, 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 μm/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.