Unit 8 - Fabrication of Sensors for Cancer Diagnosis

Course outline

How to access the portal

Introduction

Introduction to MEMS-based Sensors

Fundamentals of Fabrication Techniques

Fundamentals of Fabrication Techniques contd...

Fundamentals of Fabrication Techniques contd...

Application of Fabrication Technology

Fabrication of Sensors for Cancer Diagnosis

- Process Flow for Fabrication of Interdigited Electrodes
- Process Flow for Fabrication of Interdigited Electrodes contd.
- Process Flow for Fabrication of ETM phenotyping
- Process Flow for Fabrication of Piezoresistive Cantilever
- Quiz : Week 6 Assessment
- Solution : Week 6

Fabrication of a Device to Determine Efficacy of Drugs

Fabrication of Microchip for Rapid Drug Screening

Fabrication of a Smart Catheter

Lab: Introduction to Cleanroom and Cleanroom Equipments

Lab: Introduction to Equipments in Cleanroom

Lab: Cleanroom Equipments and Demonstration

Text Transcripts

Week 6 Assessment

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2019-09-11, 23:59 IST.

1) Hard bake is done generally between: *1 point*

- Lithography and development process
- Development and etching
- Spin coating and lithography
- Depostion and spin coating

No, the answer is incorrect.
Score: 0

Accepted Answers:
Development and etching

2) Acetone dip is done to remove: *1 point*

- Gold
- Nichrome
- Photoresist
- Chromium

No, the answer is incorrect.
Score: 0

Accepted Answers:
Photoresist

3) Process of creating IDEs after you have microheater developed will have the sequence of: *1 point*

1- Spin coat PR
2- Etching
3- Deposit Cr/Au
4- UV exposure
5- Hard-bake
6- PR removal
7- Pre-bake
8- Mask loading
9- Developing

- 1-2-3-4-5-6-7-8-9
- 3-1-7-8-4-9-5-2-6
- 3-5-7-8-2-6-1-4-9
- 3-1-7-8-6-4-9-5-2

No, the answer is incorrect.
Score: 0

Accepted Answers:
3-1-7-8-4-9-5-2-6

4) PEDOT:PSS is an example for : *1 point*

- Piezo-electric
- Pyto-electric
- Piezo-elastic
- Piezo-resistive

No, the answer is incorrect.
Score: 0

Accepted Answers:
Piezo-resistive

5) For SU-8, photoresist development is followed by hard bake. *1 point*

- True
- False

No, the answer is incorrect.
Score: 0

Accepted Answers:
False

6) Annealing after developing SU-8 helps in hardening SU-8. *1 point*

- True
- False

No, the answer is incorrect.
Score: 0

Accepted Answers:
True

7) Evaporation techniques for depositing metal have excellent step coverage *1 point*

- True
- False

No, the answer is incorrect.
Score: 0

Accepted Answers:
False

8) SU-8 pillars are used for : *1 point*

(i) Ensuring electrical contact to IDEs
(ii) Transferring force onto piezoresistive material

- (i) only
- (ii) only
- both (i) and (ii)
- none of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
both (i) and (ii)

9) SOI have a thin layer of silicon over a thick layer of silicon seperated by a thin layer of insulator. *1 point*

- True
- False

No, the answer is incorrect.
Score: 0

Accepted Answers:
True

10) Silicon Nitride is grown over cantilever for compensating stress in cantilever due to Silicon dioxide. *1 point*

- True
- False

No, the answer is incorrect.
Score: 0

Accepted Answers:
True

You were allowed to submit this assignment only once.