Metal Lift-off Processes: (Glass + Pt) and (Si + Au-Pd)

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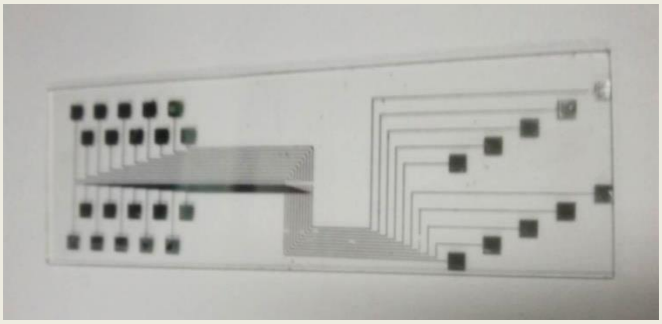
Process	Pt on Glass	Au-Pd on Si
Substrate	**Glass**	**Si**
1. Clean	Acetone→IP alcohol→ DI water	Acetone→IP alcohol→ DI water
2. Dry	N_2 gun→ hotplate: 200°C-5min	N_2 gun→ hotplate: 200°C-5min
3. Spin-coat	Shipley 2000 rmp, 45s	Shipley 2000 rmp, 45s
4. Prebake	90°C-90s	90°C-90s
5. UV pattern	6.06 mw/cm^2, 40s	6.06 mw/cm^2, 40s
6. Post bake	90°C-90s	90°C-90s
7. Develop	AZ351:DI water (1:5), 1-3min ultrasonic bath (the time is different from sample to sample. Watch your sample every 30s to avoid losing feature).	AZ351:DI water (1:5), 1-3min ultrasonic bath (the time is different from sample to sample. Watch your sample every 30s to avoid losing feature).
8. Rinse	DI water	DI water
9. Dry	N_2 gun→ hotplate 70C-90s	N_2 gun→ hotplate 70C-90s
10. UV pattern	6.06 mw^2/cm^2, 40s (to weaken the photoresist)	6.06 mw2/cm2, 40s (to weaken the photoresist)
11. Metal Sputter	**Titanium 5 nm + Pt 10 nm**	**Au/Pd (Hummer VI: V = 8.5V, I = 10 mA, t = 10 min)**
12. Strip	1165, 2min ultrasonic bath (watch the sample every 30s)	1165, 2 min ultrasonic bath (watch the sample every 30s)
13. Wash	Acetone→IP alcohol→ DI water	Acetone→IP alcohol→ DI water
14. Dry	N_2 gun→ hotplate 70°C-90s	N_2 gun→ hotplate 70°C-90s
15. Result	Clean features 	Clean features

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