

Materials List for:

Dry Film Photoresist-based Electrochemical Microfluidic Biosensor Platform: Device Fabrication, On-chip Assay Preparation, and System Operation

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Materials

Name	Company	Catalog Number	Comments
Material			
Pyralux	DuPont	AP8525R	Used as polyimide substrate
MA-N 1420	Micro Resist Technology	MA-N1420	Lift-off resist to define the platinum deposition
Ma-D 533s	Micro Resist Technology	MaD533S	Developer for MA-N1420
Platinum	-	-	Electrode and contact pad material
Ma-R 404s	Micro Resist Technology	MaR404S	Remover for MA-N1420
SU-8 3005	MicroChem Corp.	SU-8-3005	Photoresist to define the electrode area and as insulation
1-methoxy-2-propanol acetate	Sigma-Aldrich	108-65-6	Developer for SU-8 3005
2-Propanol	VWR	8.18766.2500	Removing of the SU-8 developer
1020R	Ultron Systems Inc.	1020R	UV sensitive adhesive tape for protection of contact pads
Arguna S	Degussa	1935	For Silver deposition on reference electrode
KCl	Methrom	62308.020	For chloridation of the silver reference electrode
Pyralux	DuPont	PC1025	Dry film photoresist
Sodium carbonat	Fluka	71352	Developer for Pyralux PC1025
Hydrogen chloride	Sigma-Aldrich	30720	To top the development of the DFR
Teflon AF 1600	DuPont	AF1600	For employing the stopping barrier
Equipment			
PA104	Mega Electronics	-	Bubble etch tank
FED 53	Binder	9010-0018	Oven
SPIN150	APT	-	Spin coater
Präzitherm	Harry Gestigkeit GmbH	PZ 28-2	Hot plate
Hellas	Bungard Elektronik	40000	Exposure unit
Tetra30-LF-PC	Diener	-	Plasma unit
Univex 500	Leybold	-	Physical vapor deposition unit
Shaker S4	ELMI	-	Orbital shaker
Sonorex Super 10 P	Bandelin	783	Sonic bath
6221 DC and AC	Keithley	-	Current source

HRL 350	Ozatec	-	Laminator unit
Vaccum pen	EFD	-	Vacuum pen