

Materials List for:

Fabrication of Fine Electrodes on the Tip of Hypodermic Needle Using Photoresist Spray Coating and Flexible Photomask for Biomedical Applications

Joho Yun¹, Jinhwan Kim², Jong-Hyun Lee^{1,2}

¹Department of Biomedical Science and Engineering, Gwangju Institute of Science and Technology (GIST)

²School of Mechanical Engineering, Gwangju Institute of Science and Technology (GIST)

Correspondence to: Jong-Hyun Lee at jonghyun@gist.ac.kr

URL: <https://www.jove.com/video/56622>

DOI: [doi:10.3791/56622](https://doi.org/10.3791/56622)

Materials

Name	Company	Catalog Number	Comments
Heat shrink tube	VENTION MEDICAL, Inc.	103-0655	
Hypodermic needle (22G)	HWAJIN MEDICAL co. ltd	-	http://www.hwajinmedical.com
Heat gun	Weller	WHA600	http://www.weller-tools.com/en/Home.html
Ultrasonic cleaner	HWASHIN INSTRUMENT CO, LTD.	POWERSONIC 620-	http://www.hwashin.net
Hotplate	AS ONE Corporation	006560	
Sputtering	A-Tech System. Ltd.	ATS/SPT/0208F	http://www.atechsystem.co.kr
Glass slide	Paul Marienfeld GmbH & Co. KG	1000412	
Spray coater	LITHOTEK	LSC-200	
Photoresist	AZ electronic materials	GXR 601	http://www.merck-performance-materials.com/en/index.html
Developer (solution)	AZ electronic materials	MIF 300	http://www.merck-performance-materials.com/en/index.html
Aligner	MIDAS SYSTEM CO.,Ltd.	MDA-400M	http://www.midas-system.com
Microscope	NIKON Corporation	L200	http://www.nikonmetrology.com
Au wet etchant	TRANSENE COMPANY, Inc.	Au etchant type TFA	http://transene.com
Cr wet etchant	KMG Electronic. Chemicals, Inc.	CR-7	http://kmgchemicals.com
Au target	Thin films and Fine Materials	-	http://www.thifine.co.kr
Cr target	Thin films and Fine Materials	-	http://www.thifine.co.kr
Argon gas (99.999%)	SINIL Gas Co.Ltd	-	http://www.sigas.kr
Acetone solution	OCI Company Ltd	-	http://www.ocicorp.co.kr/company/index.asp
Impedance analyzer	Gamry Instruments Inc	Reference 600	https://www.gamry.com
Height Controller	Mitutoyo Corporation	192-613	
Phosphate buffered saline	Life Technologies Corporation	10010023	