

Materials List for:

Fabrication of Nanoheight Channels Incorporating Surface Acoustic Wave Actuation via Lithium Niobate for Acoustic Nanofluidics

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URL: <https://www.jove.com/video/60648>

DOI: [doi:10.3791/60648](https://doi.org/10.3791/60648)

Materials

Name	Company	Catalog Number	Comments
Absorber	Dragon Skin, Smooth-On, Inc., Macungie, PA, USA	Dragon Skin 10 MEDIUM	
Amplifier	Mini-Circuits, Brooklyn, NY, USA	ZHL-1-2W-S+	
Camera	Nikon, Minato, Tokyo, Japan	D5300	
Developer	Futurrex, NJ, USA	RD6	
Diamond tip engraving pen	Malco, Memphis, TN, USA	Malco A50 USA Made Carbide Tipped Scribe	
Dicing saw	Disco, Tokyo, Japan	Disco Automatic Dicing Saw 3220	
Heating oven	Carbolite, Hope Valley, UK	HTCR 6/28	High Temperature Clean Room Oven - HTCR
Hole driller	Dremel, Mount Prospect, Illinois	Model #4000	4000 High Performance Variable Speed Rotary
Inverted microscope	Amscope, Irvine, CA, USA	IN480TC-FL-MF603	
Lithium niobate substrate	PMOptics, Burlington, MA, USA	PWLN-431232	4" double-side polished 0.5 mm thick 128° Y-rotated cut lithium niobate
Mask aligner	Heidelberg Instruments, Heidelberg, Germany	MLA150	
Nano3 cleanroom facility	UCSD, La Jolla, CA, USA		Fabrication process is performed in it.
Negative photoresist	Futurrex, NJ, USA	NR9-1500PY	
Oscilloscope	Keysight Technologies, Santa Rosa, CA, USA	InfiniiVision 2000 X-Series	
Plasma surface activation	PVA TePla, Corona, CA, USA	PS100	Tepla Asher
Polarizer sheet	Edmund Optics, Barrington, NJ, USA	#86-182	
RIE etcher	Oxford Instruments, Abingdon, UK	Plasmalab 100	
Signal generator	NF Corporation, Yokohama, Japan	WF1967 multifunction generator	
Sputter deposition	Denton Vacuum, NJ, USA	Denton 18	Denton Discovery 18 Sputter System
Teflon wafer dipper	ShapeMaster, Ogden, IL, USA	SM4WD1	Wafer Dipper 4"