

Materials List for:

Preparation of Silicon Nanowire Field-effect Transistor for Chemical and Biosensing Applications

Jennifer Yun-Shin Wu¹, Chih-Heng Lin², Mei-Huei Feng¹, Chien-Hung Chen², Ping-Chia Su¹, Po-Wen Yang², Jian-Ming Zheng², Chang-Wei Fu², Yuh-Shyong Yang^{1,2}

¹Institute of Molecular Medicine and Bioengineering, National Chiao Tung University

²Department of Biological Science and Technology, National Chiao Tung University

Correspondence to: Yuh-Shyong Yang at ysyang@faculty.nctu.edu.tw

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Materials

Name	Company	Catalog Number	Comments
Acetone	ECHO	AH-3102	
(3-Amonopropyl)triethoxysilane (APTES), ≥98%	Sigma-Aldrich	A3648	Danger
Ethanol, anhydrous, 99.5%	ECHO	484000203108A-72EC	
Glutaraldehyde solution (GA), 50%	Sigma-Aldrich	G7651	Avoid light
Sodium cyanoborohydride, ≥95.0%	Fluka	71435	Danger and deliquescent
Sodium phosphate tribasic dodecahydrate, ≥98%	Sigma	04277	
Phosphoric acid, ≥99.0%	Fluka	79622	Deliquescent
Photoresist (iP3650)	Tokyo Ohka Kogyo Co., LTD	THMR-iP3650 HP	
Synthetic oligonucleotides, HPLC purified	Protech Technology		
Tris(hydroxymethyl)aminomethane (Tris), ≥99.8%	USB	75825	
Keithley 2636 System SourceMeter	Keithley		
SR830 DSP Lock-In Amplifier	Stanford Research Systems		
SR570 Low-noise Current Preamplifier	Stanford Research Systems		
Ni PXI Express	National Instruments		