

Materials List for:

Fabrication and Characterization of Superconducting Resonators

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Materials

Name	Company	Catalog Number	Comments
Protocol Section 1			
Microposit S-1811 Photoresist	Shipley		
BCB	Dow		3022-35
SOI wafers	SOITec		Fabricated with SmartCut™ process
Mo	Kamis		99.99%
Nb	Kamis		99.95% (excludes Ta)
E-6 metal etch w/AES	Fujifilm		CPG Grade
Acetone	JT Baker	9005-05	CMOS Grade
HF dip (1:10)	JT Baker	5397-03	
PMMA	Microchem		950 PMMA A2
Protocol Section 2			
GE 7031	General Electric		Low-temperature adhesive
Protocol Sections 3-4			
Cryogenic Microwave Amplifier	MITEQ	AF S3-02000400-08-CR-4	2-4 GHz, gain ~30 dB
NbTi Semi-rigid SMA cables	Coax. Co.	SC-086/50-NbTi-NbTi	
Circulator	PamTech	CTD1229K	return loss > -20 dB from 2-4 GHz
RF attenuator	Weinschel	Model-4M	7 dB attenuation
Flexible SMA cables	Teledyne-Storm	R94-240	ACCU-TEST
Vector Network Analyzer	Agilent	N5242A PNA-X	
Liquid He-4 cryogen	Praxair		
Liquid N ₂ cryogen	Praxair		