

Materials List for:

# Fabrication of Nanopillar-Based Split Ring Resonators for Displacement Current Mediated Resonances in Terahertz Metamaterials

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## Materials

Name	Company	Catalog Number	Comments
Silicon Wafer	Siltronic AG	N/A	100 mm diameter, N-type, one-side polish, resistivity: 560-840 $\Omega \cdot \text{cm}$
Chromium	Kurt J. Lesker Company	EVMCR35J	99.95% pure
Copper	Kurt J. Lesker Company	EVMCU40QXQJ	99.99% pure
E-Beam Evaporator System	Rocky Mountain Vacuum Tech.	N/A	RME-2000
S1813 Positive Photoresist	Microposit	10018348	N/A
Spinner	Best Tools	S0114031123	SMART COATER 100
Mask Aligner	Midas	MDA-400LJ	N/A
Digital Hot Plate	Thermo Scientific	HP131725	Super-Nuova series, maximum temperature: 370 °C
MF319 Developer	Microposit	10018042	N/A
Acetone	Fisher Chemical	A18P-4	N/A
Isopropyl Alcohol	Fisher Chemical	A416-4	N/A
Gold 25 ES RTU	Technic Inc.	391427	N/A
Source Meter	Keithley	N/A	2612 System SourceMeter
Microscope	Omax	NJF-120A	N/A
Profilometer	Tencor Instruments	N/A	Alpha-Step 200
APS Copper Etchant 100	Transfene Company, Inc.	N/A	N/A
CE-5 M Chromium Mask Etchant	Transfene Company, Inc.	N/A	N/A
Atomic Layer Deposition System	Cambridge Nano Tech inc.	N/A	Savannah series
Ion Mill Etching System	Intlvac Thin Film	N/A	Nanoquest series
Ultrasonic Cleaner	Crest Ultrasonics	N/A	Powersonic series
Hydrofluoric Acid	Sigma-Aldrich	244279	Diluted to 5%
Field Emission Gun Scanning Electron Microscope	Jeol Ltd.	N/A	JEOL 6700 series