

Fabrication of Micro-Patterned Chip with Controlled Thickness for High-Throughput Cryogenic Electron Microscopy

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Materials

Name	Company	Catalog Number	Comments
1-methyl-2-pyrrolidinone (NMP)	Sigma Aldrich, USA	443778	
Acetone			
AFM	Park Systems, South Korea	NX-10	
Aligner	Midas System, South Korea	MDA-600S	
AZ 300 MIF developer	AZ Electronic Materials USA Corp., USA	184411	
Cryo-EM holder	Gatan, USA	626 single tilt cryo-EM holder	
Cryo-plunging machine	Thermo Fisher SCIENTIFIC, USA	Vitrobot Mark IV	
Focused ion beam-scanning electron microscopy (FIB-SEM)	FEI Company, USA	Helios NanoLab 650	
Glow discharger	Ted Pella Inc., USA	PELCO easiGlow	
Graphene oxide (GO) solution	Sigma Aldrich, USA	763705	
Hexamethyldisizazne (HMDS), 98+%	Alfa Aesar, USA	10226590	
Low pressure chemical vapor deposition (LPCVD)	Centrotherm, Germany	LPCVD E1200	
maP1205 positive PR	Micro resist technology, Germany	A15139	
Potassium hydroxide (KOH), flake	DAEJUNG CHEMICALS & METALS Co. LTD., South Korea	6597-4400	
Raman Spectrometer	NOST, South Korea	Confocal Micro Raman System HEDA	
Reactive ion etcher (RIE)	Scientific Engineering, South Korea	Lab-built	
SEM	Carl Zeiss, Germany	SUPRA 55VP	
Si wafer	JP COMMERCE, South Korea		4" Silicon wafer, P(B)type, (100), 1-30ohm.c m, DSP, T:100um
Spin coater	Dong Ah Trade Corp., South Korea	ACE-200	

TEM	JEOL, Japan	JEM-2100F	
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