

Crystallization of Proteins on Chip by Microdialysis for *In Situ* X-ray Diffraction Studies

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Materials

Name	Company	Catalog Number	Comments
3 in wafer	Silicon Materials Inc.		Silicon wafer
Centrifuge	Eppendorf	Minispin	Bench-top centrifuge
CleWin 3.0	WieWeb software		Designing software
Epoxy glue	Devcon		5 minutes epoxy glue
Fluidic connectors	Cluzeau Info Lab	N-333	NanoPort kit for 1/16" OD tubing
Hen egg-white lysozyme	Roche	10 837 059 001	Lyophilized protein powder
High-vacuum silicone grease	Sigma-Aldrich	Z273554	Dow Corning high-vacuum silicone grease
HMDS	Sigma-Aldrich	440191	Silane, chemical
Hot plate	Sawatec	HP-200-Z-HMDS BM	Hot plate
Isopropyl alcohol	Sigma-Aldrich		Solvent
Kapton tape	DuPont		Polyimide tape
Mask aligner	SUSS MicroTec	MJB4	Mask aligner, UV source
Membrane filter	Millipore	GSWP04700	0.22 µm pore size filter
Microscope glass slide	Fisher Scientific	12164682	3 x 1 in glass slides
NOA81	Norland Products Inc.	NOA81	Photocurable resin
Oven	Memmert		Oven
Parafilm	Sigma-Aldrich	P6543	Parafilm M roll size 20 in. x 50 ft
PDMS	Dow Corning	Sylgard 184	Silicone
PEG 400	Hampton Research	HR2-603	Chemical
Petri dish	Sigma-Aldrich	P5731	100 x 15 mm
PGMEA	Sigma-Aldrich	484431	Developer
Plasma equipment	Diener Electronic	ZEPTO	Plasma treatment
PMMA	Goodfellow	137-745-63	PMMA sheets 150x150 mm, 0.175 mm thickness
Pressure driven system	Elveflow	OB1 MK3+	Pressure/vacuum controller
PTFE tubing	Elveflow/Darwin microfluidics	LVF-KTU-15	PTFE tubing roll 1/16" OD X 1/32" ID
RC dialysis membrane	Spectra/Por		Various MWCOs

Scalpel	Swann-Morton		Carbon steel surgical blades
Sodium acetate	Sigma-Aldrich	S2889	Chemical
Sodium chloride	Sigma-Aldrich	746398	Chemical
Solidworks	Dassault Systemes		3D-CAD designing software
Spin coater	SPS	Spin150	Wafer spinner
SU-8 3000 series	MicroChem Corp.	SU-8 3050	Photoresist
Syringe	BD	309628	1 mL Luer-Lok syringe
UV crosslinker	Uvitec	CL-508	UV crosslinker