

Materials List for:

Antifouling Self-assembled Monolayers on Microelectrodes for Patterning Biomolecules

John Noel¹, Winfried Teizer¹, Wonmuk Hwang²

¹Department of Physics, Texas A&M University (TAMU)

²Department of Biomedical Engineering, Texas A&M University (TAMU)

Correspondence to: Wonmuk Hwang at hwm@tamu.edu

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Materials

Name	Company	Catalog Number	Comments
2-[methoxypoly-(ethyleneoxy)propyl]-trimethoxysilane (PEG-silane)	Gelest Inc.	SIM6492.7	6-9 PEG units;molecular weight 450-600 g mol ⁻¹
2-mercapt-ethanol	Sigma-Aldrich	M7522	
Acetone	EMD Millipore	AX0120-8	ACS grade
Catalase	Calbiochem	219001-5MU	
Chlorobenzene	EMD Millipore	MK441908	ACS grade
Ethylene glycol-bis(2-amin-ethylether)-N,N',N'-tetraacetic acid (EGTA)	Calbiochem	324626	
Glucose	EMD Millipore	DX0145-1	
Glucose oxidase	MP Biomedicals	100330	
Guanosine-5'-[(α , β)-methyleno]triphosphate, Sodium salt (GMP CPP)	Jena Biosciences, GmbH	NU-405s	
Guanosine-5'-triphosphate	Sigma-Aldrich	G8752	
Isopropanol	EMD Millipore	PX1835-5	ACS grade
Methyl isobutyl ketone (MIBK)	Fisher Scientific	AC12739-0010	
Paclitaxel (taxol)	Calbiochem	580555	
Piperazine-N,N"-bis(2-ethanesulfonic acid) (PIPES)	Sigma-Aldrich	P1851	
Polymethylmethacrylate (PMMA)	Brewer Science, Inc.	950K	molecular weight 950K
Rhodamine tubulin	Cytoskeleton, Inc.	T331M	from bovine brain 99% pure, lyophilized
Toluene	EMD Millipore	TX0735-5	ACS grade
Tubulin	Cytoskeleton, Inc.	T238	from bovine brain 99% pure, lyophilized
No. 1 borosilicate glass coverslips (22 X 50 mm) were purchased from VWR. Polished electronic grade p-type <111> silicon wafers were purchased from Addison Engineering, Inc. High-purity silver paint was obtained from Structure Probe, Inc. (Catalog # 5001 AB). Insulated fine gauge copper magnet wire (~ 0.08 mm (0.003") diameter) can be obtained from electronic supply companies.			