

Materials List for:

Studying Dynamic Processes of Nano-sized Objects in Liquid using Scanning Transmission Electron Microscopy

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Materials

Name	Company	Catalog Number	Comments
Binocular light microscope	Leica	M60 CMO	
Scanning transmission electron microscope with spherical aberration corrector	JEOL	ARM200F	
Liquid flow TEM specimen holder	DENS Solutions	Ocean	
Microfluidic syringe pump	Harvard Scientific	PicoPlus	
Plasma cleaner	Gatan	Solarus950	
Chemicals			
Acetone, Rotisolv Plus for HPLC	Sigma-Aldrich	7328.2	
Water, chromasolv Plus for HPLC	Sigma-Aldrich	34877-2.5L	
Ethanol, Rotisolv HPLC grade	Carl Roth	P076.2	
Gold colloid citrate stabilized, diameter 30 nm	British-Biocell	EM.GC20	
Materials			
Base silicon microchips with silicon nitride membranes of 50 nm thickness and dimensions of 20 µm x 0.40 mm	DENS Solutions	for Ocean system	
Spacer silicon microchips with silicon nitride membranes of 50 nm thickness, dimensions of 20 µm x 0.40 mm, and spacer thickness of 200 nm	DENS Solutions	for Ocean system	
Microfluidic peek tubing	Upchurch Scientific	1570	
Plastic Replaceable tips Tweezers			
(Anti-Magnetic Anti-Acid Stainless Steel body with ESD PVDF (SV) tips)	ideal-tek	2ASVR.SA	
Teflon coated bent steel tweezers (EMS SA with "PTFE" Coating)	Electron Microscopy Sciences	78322-7Te	
Teflon coated broad beak steel tweezers (EMS 2A "PTFE" Coating)	Electron Microscopy Sciences	78322-2ATe	
Hamilton syringe, 1 mL, gastight (Model 1001 TLLX SYR)	Hamilton	81323	
Clean room tissue Sontara Micropure AP (224 x 224mm)	DuPont	Sontara MicroPure	