

Materials List for:

Experimental Multiscale Methodology for Predicting Material Fouling Resistance

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Materials

Name	Company	Catalog Number	Comments
Atomic Force Microscope	Asylum	MFP3D-BIO	
AFM Functionalized Cantilevers	Novascan		1 micron spheres glued on using proprietary technique
NiO Nanoparticles	Alfa Aesar		8-20nm average particle size
Fe ₃ O ₄ Nanoparticles	Alfa Aesar		20-30nm average particle size
Silver conductive grease with silicone base	Chemtronics		The higher the thermal conductivity, the better
H ₃ BO ₃	Mallinckrodt		99.945% pure
LiOH	Alfa Aesar		99.995% pure
Heat Flux Sensor (500kW/m ²)	Captec Enterprise		1cm x 1cm
PID Temperature Controller	Omega	C9000A	Configured for SSR operation
Logomatic V2 Serial Data Logger in Enclosure	Ocean Controls		Acquires 0-3.3V, 0-12V, or 4-20mA signals on 8 channels at up to 1kHz