

Materials List for

Tracking Electrochemistry on Single Nanoparticles with Surface-Enhanced Raman Scattering Spectroscopy and Microscopy

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Materials

Name	Company	Catalog Number	Comments
Acetone, microelectronic grade	J. T. Baker	9005-05	
Adjustable pipette, Eppendorf Reference 2 5000 mL	Eppendorf	4924000100	
Analytical Balance, AB54-S/FACT	Mettler Toledo	N.A.	
Atomic Force Microscope, Easy scan 2	Nanosurf	N.A.	
AXXIS Electron Beam Thin Film Deposition System	Kurt J. Lesker	N.A.	
Cary 60 UV-Vis Spectrophotometer	Agilent	N.A.	
Conductive epoxy, two part	Electron Microscopy Sciences	12642-14	
Copper pellets, 99.99% pure	Kurt J. Lesker	EVMCU40EXE	
Copper wire, bare, 18 AWG	VWR	66248-040	
Crucible, Graphite E-Beam	Kurt J. Lesker	EVCEB-23	
Diamond Scriber	Ted Pella	54484	
EMCCD Camera, ProEM HS: 1024BX3	Teledyne Princeton Instruments	N.A.	
Epoxy, Clear	Gorilla Glue	N.A.	
Glass Tube Cutter	Wheeler-Rex	69012	
Glass Tube, Borosilicate (OD 0.75", ID 0.62", L 12")	McMaster-Carr	8729K45	
Immersion oil, Type-F	Olympus	IMMOIL-F30CC	
Inverted Microscope, IX73	Olympus	N.A.	
Laser, Excelsior One 642 nm Free space	Spectra-Physics	N.A.	
LightField	Teledyne Princeton Instruments	N.A.	
MATLAB 2022b	MathWorks	N.A.	

Micro cover glass (coverslips), 24×60 mm No. 1	VWR	48404-455	
Microscope Smartphone Camera Adapter	qhma	QHMC017A-S01	
Nile Blue A, pure	Acros Organics	415690100	
Nitrogen, Ultra Pure, Compressed	Specialty Gases	N.A.	
Objective, UPLanXApo 100× Oil Immersion	Olympus	14-910	
Polyimide Film, Kapton	3M	16089-4	
Potassium Phosphate Monobasic	VWR	P285	
Potentiostat, 660E	CH Instruments	N.A.	
Pt wire	Alfa Aesar	10956-BS	
Scanning Electron Microscope, Apreo C SEM	Thermo Fischer Scientific	N.A.	
Si wafer	Ted Pella	16006	
Silver nanoparticles (nanospheres), NanoXact 0.02 mg/mL in 2 mM citrate	nanoComposix	AGCN60	
Silver pellets, 99.99% pure	Kurt J. Lesker	EVMAG40EXE-A	
Slide Rack, Wash-N-Dry	Diversified Biotech	WSDR-2000	
Smartphone, iPhone 13 mini	Apple	N.A.	
Sodium Phosphate Dibasic Heptahydrate	VWR	0348	
Spectrometer, IsoPlane SCT320	Teledyne Princeton Instruments	N.A.	
Tissue Wipers, Light-duty	VWR	82003-820	
Tweezers, KS-04	Kaisi Hardware	N.A.	
Ultrasonic Generator, sweepSONIK	Blackstone-NEY Ultrasonics	809379	
Water Ultrapurifier, Sartorius Arium mini	Sartorius	N.A.	