

Materials List for

Advances in Nanoscale Infrared Spectroscopy to Explore Multiphase Polymeric Systems

Rebecca Young^{1,2}, Laurene Tetard^{1,2}

¹Nanoscience Technology Center, Physics Department, University of Central Florida ²Physics Department, University of Central Florida

Corresponding Author

Laurene Tetard

laurene.tetard@ucf.edu

Citation

Young, R., Tetard, L. Advances in Nanoscale Infrared Spectroscopy to Explore Multiphase Polymeric Systems. *J. Vis. Exp.* (196), e65357, doi:10.3791/65357 (2023).

Date Published

June 23, 2023

DOI

10.3791/65357

URL

jove.com/video/65357

Materials

Name	Company	Catalog Number	Comments
10 0 2200 Golden Taklon Round	Zem		
5357-8NM Tweezers	Pelco		
Adhesive Tabs	Ted Pella	16079	
AFM metal specimen disks	Ted Pella	16208	
Binocular	AmScope		
Cantilever for nanoIR measurements	AppNano		FORTGG
Cell culture dishes	Greiner bio-one GmbH		
Desiccator			
Floating optical table	Newport	RS 4000	
Hotplate	VWR		
Isopropanol			
Kimwipes	KIMTECH		
Magnetic stir bar			
Microparticles based on polystyrene size: 5 μm	SIGMA-ALDRICH	79633	
nanoIR2 microscope	Bruker		Contact mode NanoIR2
Nitrogen Tank	Airgas		
Petri dishes	Greiner bio-one GmbH		
Polyvinyl Alcohol	SIGMA-ALDRICH	363170	this polymer was only 87%-89% hydrolyzed, which explains the presence of residual C=O at 1730 cm^{-1}
Quantum Cascade Laser	Daylight Solutions		1550-1800 cm^{-1} range
Silicon wafer	MEMC St. Peters	#901319343000	
Spin coater	Oscilla		