

Materials List for:

# Liquid-cell Transmission Electron Microscopy for Tracking Self-assembly of Nanoparticles

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URL: <https://www.jove.com/video/56335>

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## Materials

Name	Company	Catalog Number	Comments
ammonium hexachloroplatinate (IV)	Sigma-Aldrich	204021	
ammonium tetrachloroplatinate (II)	Sigma-Aldrich	206105	
tetramethylammonium bromide, 98%	Sigma-Aldrich	195758	
poly(vinylpyrrolidone) powder	Sigma-Aldrich	234257	Mw ~29,000
ethylene glycol, anhydrous, 99.8%	Sigma-Aldrich	324558	
n-hexane, anhydrous, 95%	Samchun Chem.	H0114	
ethanol, anhydrous, 99.5%	Sigma-Aldrich	459836	
oleylamine, 70%	Sigma-Aldrich	O7805	Technical grade
lead(II) acetate trihydrate, 99.99%	Sigma-Aldrich	467863	
oleic acid, 90%	Sigma-Aldrich	364525	Technical grade
diphenyl ether, 99%	Sigma-Aldrich	P24101	ReagentPlus
selenium powder, 99.99%	Sigma-Aldrich	229865	
tri-n-octylphosphine, 97%	Strem	15-6655	Air sensitive
Toluene, anhydrous, 99.9%	Samchun Chem.	T2419	
acetone 99.8%	Daejung Chem.	1009-2304	
potassium hydroxide, 95%	Samchun Chem.	P0925	
p-type silicon-on-insulator wafers	Soitec	Power-SOI	for liquid cells with silicon windows
tetramethylammonium hydroxide, 25% in H <sub>2</sub> O	J.T.Baker	02-002-109	
AZ 5214 E	AZ Electronic Materials	AZ 5214 E	Positive photorest
AZ-327	AZ Electronic Materials	AZ-327	AZ 5214 developer
indium pellets 99.98-99.99%	Kurt J. Lesker Company	EVMIN40EXEB	thermal evaporator target
1,2-dichlorobenzene, >99%	TCI	D1116	
pentadecane, >99%	Sigma-Aldrich	P3406	
buffered oxide etch 7:1	microchemicals	BOE 7-1 VLSI	
phosphoric acid, 85%	Samchun Chem.	P0449	