

Materials List for:

Fabrication of Fully Solution Processed Inorganic Nanocrystal Photovoltaic Devices

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Materials

Name	Company	Catalog Number	Comments
Oleic acid, 90%	Sigma Aldrich	364525	
1-octadecene, 90%	Sigma Aldrich	O806	Technical grade
Trioctylphosphine (TOP), 90%	Sigma Aldrich	117854	Air sensitive
Trimethylsilyl chloride, 99.9%	Sigma Aldrich	92360	Air and water sensitive
Se, 99.5+%	Sigma Aldrich	209651	
NH ₄ Cl, 99%	Sigma Aldrich	9718	
CdCl ₂ , 99.9%	Sigma Aldrich	202908	Highly toxic
CdO, 99.99%	Strem	202894	Highly toxic
Te, 99.8%	Strem	264865	
In(NO ₃) ₃ ·2.85H ₂ O, 99.99%	Sigma Aldrich	326127-50G	
SnCl ₂ ·2H ₂ O, 99.9%	Sigma Aldrich	431508	
NH ₄ OH	Sigma Aldrich	320145	Caustic
NH ₄ NO ₃ , 99%	Sigma Aldrich	A9642	
HAuCl ₄ ·3H ₂ O, 99.9%	Sigma Aldrich	520918	
Tetraoctylammonium bromide (TMA-Br)	Sigma Aldrich	294136	
Toluene, 99.8%	Sigma Aldrich	244511	
Hexanethiol, 95%	Sigma Aldrich	234192	
NaBH ₄ , 96%	Sigma Aldrich	71320	
Hexanes, 98.5%	Sigma Aldrich	650544	
Ethanol, 99.5%	Sigma Aldrich	459844	
Methanol, anhydrous, 99.8%	Sigma Aldrich	322415	
1-propanol, 99.5%	Sigma Aldrich	402893	
2-propanol, 99.5%	Sigma Aldrich	278475	
Pyridine, > 99%	Sigma Aldrich	360570	Purified by distillation
Heptane	Sigma Aldrich	246654	
chloroform > 99%	Sigma Aldrich	372978	
Acetone	Sigma Aldrich	34850	
Glass microscope slides	Fisher	12-544-4	Cut with glass cutter
Gravity Fed Airbrush	Paasche	VSR90#1	
Syringe needle	Fisher	CAD4075	

Solar Simulator Testing Station	Newport	PVIV-1A	
Software	Oriel	PVIV 2.0	
Round bottom flask	Sigma Aldrich	Z723134	
Round bottom flask	Sigma Aldrich	Z418668	
Polytetrafluoroethylene (PTFE) syringe filter	Sigma Aldrich	Z259926	
Polyamide tape	Kapton	KPT-1/8	
Cellophane tape	Scotch	810 Tape	
Polypropylene centrifuge tube	Sigma Aldrich	CLS430290	
Silver epoxy	MG Chemicals	8331-14G	