Materials List for:

Harvesting Solar Energy by Means of Charge-Separating Nanocrystals and Their Solids

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Materials

Name	Company	Catalog Number	Comments
octadecylamine (ODA), 90%	Fisher	AC12932-0050	
selenium (Se), 200 mesh	Acros	AC19807-2500	
tri-n-octylphosphine (TOP), 97%	Strem	15-6655	Air Sensitive
diethyl zinc (Et2Zn), 10% by wt.	Aldrich	22080	Air Sensitive, Light Sensitive
methanol, 99.8%, anhydrous	Aldrich	179337	
toluene, 99.8%, anhydrous	Aldrich	244511	
tri-n-octylphosphine oxide (TOPO), 99%	Aldrich	223301	
n-octadecylphosphonic acid (ODPA), 98%	PCI Synthesis	104224	
hexylphosphonic acid (HPA), 98%	PCI Synthesis	4721-24-8	
cadmium oxide (CdO), 99.99%	Aldrich	202894	
sulfur (S), 99.999%	Acros	AC19993-0500	Strong odor
11-mercaptoundecanoic acid (MUA), 95%	Aldrich	450561	
potassium hydroxide (KOH)	Acros	AC13406-0010	
chloroform	VWR	EM-CX1059-1	
lead oxide (PbO), 99.999%	Aldrich	32306-1KG	
1-octadecene (ODE), 90%	Aldrich	O806-25ML	
oleic acid (OA), 90%	Aldrich	O1008-1G	
bis(trimethylsilyl) sulfide (TMS), synthetic grade	Aldrich	283134-25G	Air sensitive, strong odor, highly reactive
acetone	EMD Chemicals	AX0118-2	
cadmium acetate	Acros	AC31713-5000	
sodium sulfide nonahydrate ($Na_2S{\cdot}9H_2O$), 98%	Alfa Aesar	CB1100945	Light sensitive
hexadecyltrimethyl ammonium bromide (CTAB), 99%	Sigma	H6269-100G	
oleylamine, 70%	Aldrich	O7805-5G	
diphenyl ether	Alpha Aesar	101-84-8	
1,2-hexadecanediol	TCI	6920-24-7	
Pt (II) acetylacetonate, 97%	Aldrich	282782-5G	
isopropanol, 99.8%, anhydrous	Acros	AC32696-0025	

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titanium tetrachloride ($TiCl_4$), 99.9%	Aldrich	697079-25G	Extremely air sensitive
titanium dioxide, DSL 90T	DyeSol	DSL 90T	
terpineol	MP Biomedical	98-55-5	
3-mercaptopropionic acid (MPA), 99%	Alfa Aesar	A10435	Strong odor
octane, anhydrous, 99%	Aldrich	412236	

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