

Materials List for:

# Improved Heterojunction Quality in Cu<sub>2</sub>O-based Solar Cells Through the Optimization of Atmospheric Pressure Spatial Atomic Layer Deposited Zn<sub>1-x</sub>Mg<sub>x</sub>O

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## Materials

Name	Company	Catalog Number	Comments
Copper foil	Avocado Research Chemicals LTD T/A Alfa Aesar	13380	0.127 mm thick, 99.9% (metals basis), annealed
Rapidox Oxygen analyzer	Rapidox	Model 2100	
Alumina boat	Almath Crucibles LTD	6121203	Dimensions 20 mm x 50 mm x 5 mm
Gold pellets	KJLC	EVMAUXX40G	99.99% pure, 1/8" x 1/8", sold by the gram
Diethylzinc	Aldrich	256781	≥52 wt. % Zn basis
Bis(ethylcyclopentadienyl)magnesium	Strem Chemicals UK	12-0510	5 g
ITO target	GoodFellow Cambridge Limited	LS 427438	Indium Oxide/Tin Oxide target (In <sub>2</sub> O <sub>3</sub> 90 / SnO <sub>2</sub> 10). Condition: Hot-pressed. Thickness: 2.0 mm ± 0.5 mm. Size: 35.5 mm x 55.5 mm ± 0.5 mm
VHT engine enamel paint	Halfords	325019	very high temperature engine enamel black paint
Nitric acid HNO <sub>3</sub> , ACS reagent 70%	Sigma-Aldrich Co Ltd	438073-2.5L	Harmful, irritant
2% Oxygen/Argon 200 bar	BOC Limited	225757-L	gas mixture for Cu foil oxidation, to be diluted with Ar