Supporting Information :

Nanocrystalline Copper Indium Selenide (CuInSe₂) Particles for Solar Energy Harvesting

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Supporting Information S1:

Synthesis of CuSeO3 and In2(SeO3)3

We synthesized CuSeO₃ and In₂(SeO₃)₃ by simple precipitating reaction of NaSeO3 and corresponding

metal salts in aqueous medium. The ionic exchange reactions are described as below:

NaOH+SeO₂→NaSeO₃+H₂O

 $NaSeO3+Cu(NO_3)_2 \rightarrow CuSeO_3+NaNO_3$

NaSeO₃+InCl₃→In₂(SeO₃)₃+NaCl

Supporting Information S2:

Morphologies of (a) CuSeO₃ and (b) In₂(SeO₃)₃



Supporting Document S3

(a) XRD spectra and (b) FESEM image of products synthesized in DMF without co-solvent.



Supporting Document S4

FTIR spectrum of products synthesized in DMF without co-solvent.



Supporting Document $\mathbf{S5}$

Morphologies of CuInSe₂ for 48hr reactions at different precursor concentrations (a): 0.02M; (b):0.04M and (c): 0.08M in H₂O-DMF.



(a) (b) (c)

Supporting Information S6:

Typical EDX spectra of CuInSe₂



Supporting Information S7:

Photo current against potential (J-V) curves for $CuInSe_2$ nanocrystals synthesized with different precursor concentrations (0.02M, 0.04M and 0.08M) in Me-DMF for 24 hr.

