

## Supplementary Information

### **AgInS<sub>2</sub>/CdSe Type-II Core/Shell Quantum Dot-Sensitized Solar Cells with an Efficiency of 11.75% Under 0.1 sun**

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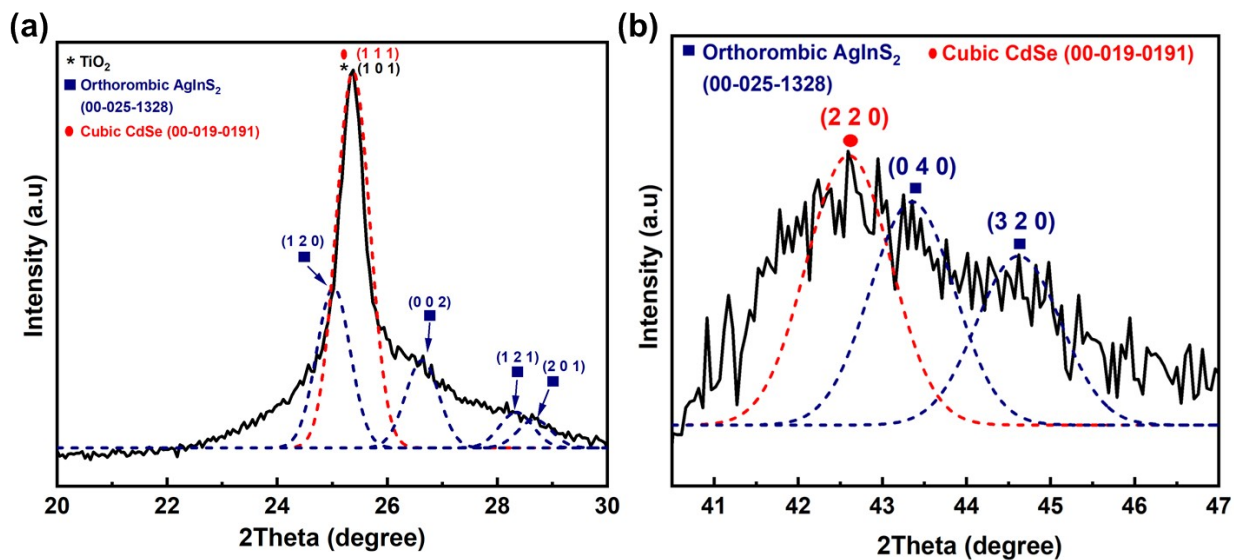
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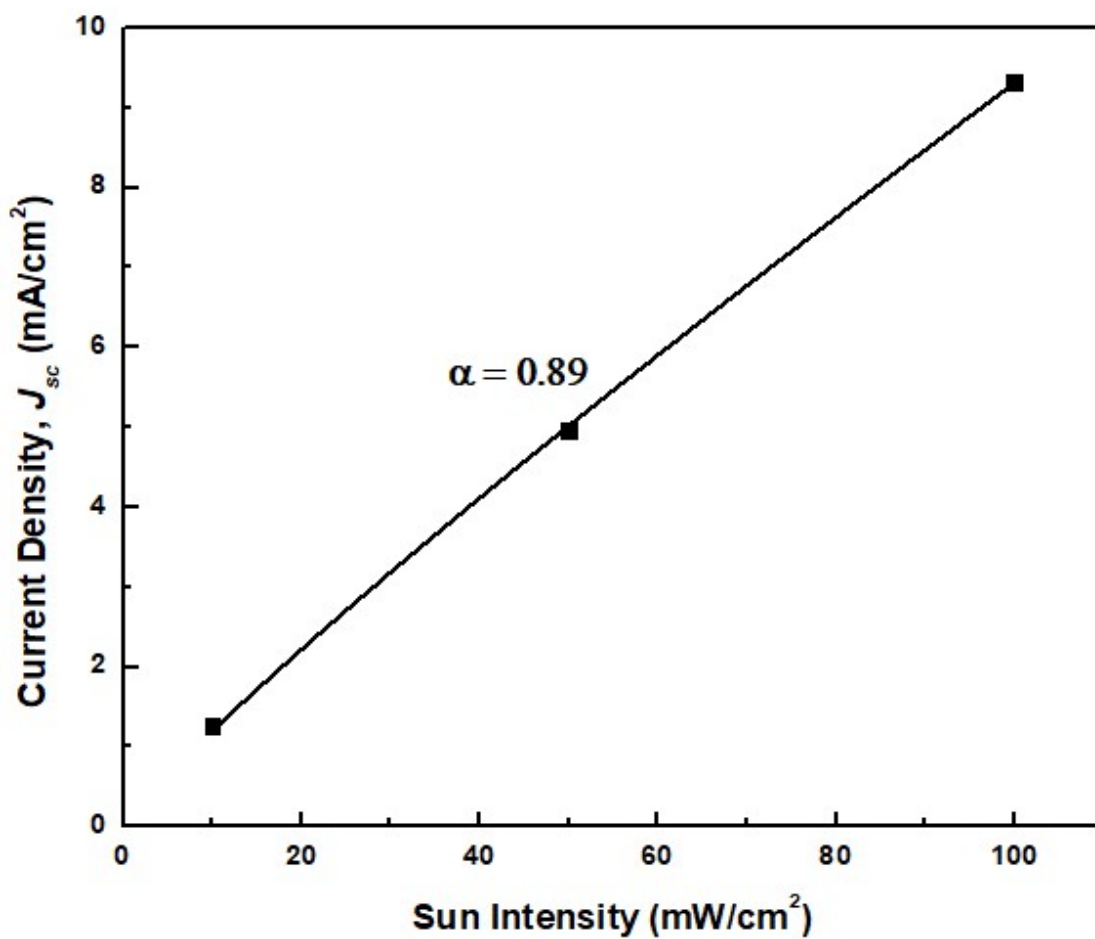
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**Fig. S1.** The deconvoluted spectra analysis of XRD pattern of  $\text{TiO}_2/\text{AgInS}_2/\text{CdSe}$  core-shell at the angle of (a)  $20^\circ$ - $30^\circ$  and (b)  $40^\circ$ - $47^\circ$



**Fig. S2.** Sun intensity dependence of the current density,  $J_{sc}$ . The data are fitted with the power law equation to determine the degree of linearity of the photocurrent with the sun intensity.