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Supporting Information† (SI†)

Recombination control in high-performance quantum dot-sensitized solar cells with novel TiO_2/ZnS/CdS/ZnS heterostructure

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Table S1. Solar cell parameters of QDSSC (multiple cells) with various photoanodes

Counter Electrode	V_{OC} (V)	J_{SC} (mA cm^{-2})	FF	η (%)	Average η (%)
TiO_2/CdS (Cell1)	0.627	6.55	0.527	2.11	
TiO_2/CdS (Cell 2)	0.605	6.46	0.531	2.08	2.09
TiO_2/CdS (Cell 3)	0.607	6.51	0.529	2.09	
TiO_2/CdS/ZnS (Cell 1)	0.623	8.61	0.563	3.02	
TiO_2/CdS/ZnS (Cell 2)	0.617	8.53	0.563	2.96	3.02
TiO_2/CdS/ZnS (Cell 3)	0.620	8.69	0.566	3.05	
TiO_2/ZnS/CdS/ZnS (Cell 1)	0.640	10.32	0.565	3.73	
TiO_2/ZnS/CdS/ZnS (Cell 2)	0.635	10.25	0.566	3.69	3.69
TiO_2/ZnS/CdS/ZnS (Cell 3)	0.636	0.566	0.566	3.68	

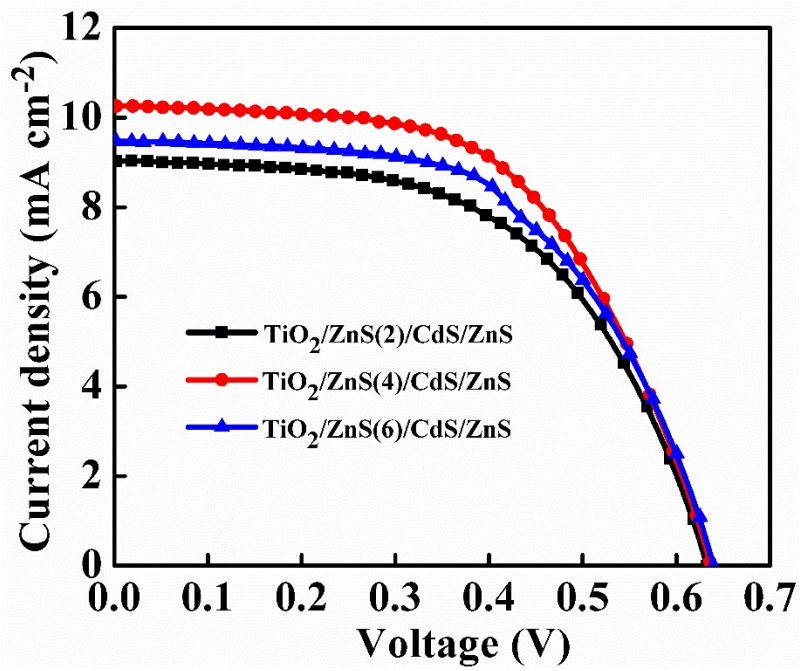

Figure S1 J-V curves of QDSSCs made with different ZnS SILAR cycles between TiO_2 and CdS/ZnS

Table S2 Photovoltaic parameters of QDSSCs made with different ZnS SILAR cycles between TiO_2 and CdS/ZnS

Cell	V_{OC} (V)	J_{SC} (mA cm^{-2})	FF	η%
TiO_2/ZnS(2)/CdS/ZnS	0.629	9.04	0.560	3.18
TiO_2/ZnS(4)/CdS/ZnS	0.635	10.25	0.566	3.69
TiO_2/ZnS(6)/CdS/ZnS	0.639	9.47	0.564	3.42