

Supporting Information

Light Re-harvesting and Enhanced Efficiency of Dye-sensitized Solar Cells Based 3D-CNT/graphene Counter Electrodes

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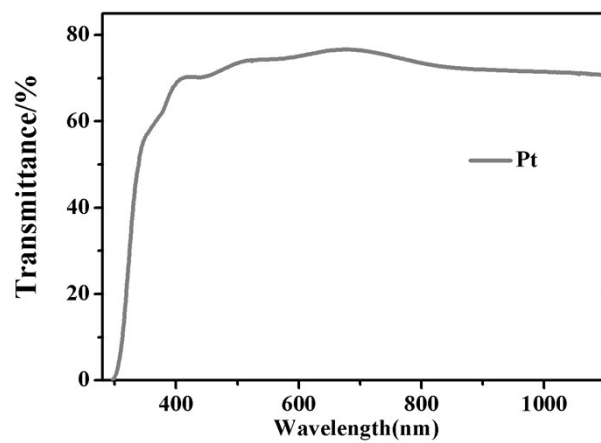


Fig. S1 UV-Vis transmittance spectra of Pt counter electrode

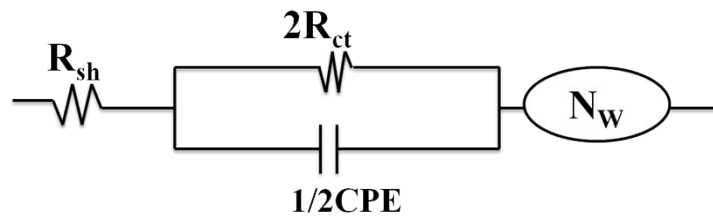


Fig. S2 Corresponding equivalent circuit of the EIS for MCG dummy cells

Table S1. Photovoltaic performance of DSSCs with different CEs.

CEs	V_{oc} (V)	J_{sc} (mA·cm ²)	ΔJ (mA·cm ²)	Improvement ($\Delta J/J_{sc}$)	FF(%)	η (%)
T _{72%}	0.726	15.93			40.0	4.63
With a mirror	0.735	18.07	2.14	13.4%	39.1	5.19
T _{60%}	0.732	16.92			46.0	5.70
With a mirror	0.731	18.63	1.71	10.1%	45.2	6.15
T _{50%}	0.754	16.70			49.1	6.19
With a mirror	0.750	17.86	1.16	6.9%	48.4	6.41
T _{40%}	0.733	17.02			54.5	6.80
With a mirror	0.729	18.22	1.20	7.1%	53.7	7.13
T _{30%}	0.730	17.16			59.1	7.40
With a mirror	0.733	17.93	0.83	4.8%	58.7	7.70
T _{20%}	0.762	15.60			62.5	7.42
With a mirror	0.762	15.92	0.32	2%	62.2	7.54
T _{11%}	0.732	17.03			61.1	7.62
With a mirror	0.732	17.63	0.6	3.5%	58.9	7.60
Pt	0.767	16.26			55.3	6.90
With a mirror	0.769	18.13	1.87	11.5%	54.3	7.58