Electronic Supplementary Information

for

Unexpected efficiency enhancement of flexible dye-sensitized solar cells by repeated outward bending

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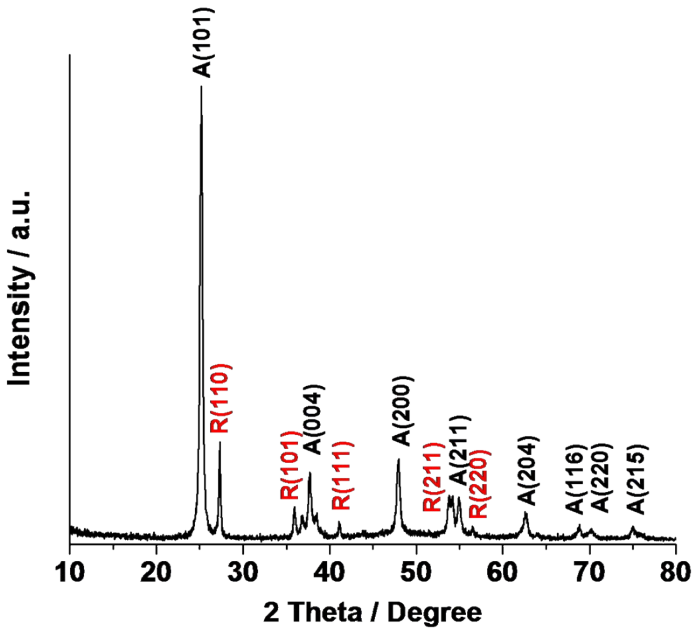

Figure S1 Typical XRD pattern for the commercial P25 TiO_2.

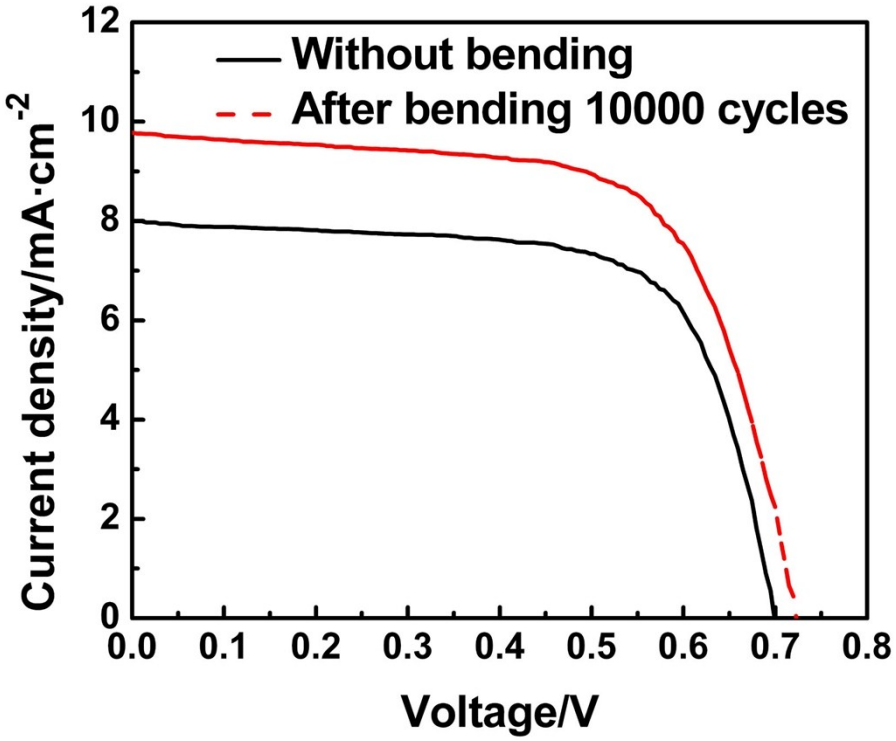

Figure S2 Photovoltaic performance before bending and after 10000 cycles of bending with a radius of 18 mm.

Figure S3 illustrates a generalized equivalent circuit for a complete DSC, where *R*s is the equivalent series resistance, R_{CO} and C_{CO} stand for the resistance and capacitance at the TCO/TiO_2 interface, respectively. R_{TCO} and C_{TCO} represent the resistance and capacitance at the exposed TCO/electrolyte interface, respectively. R_t represents the electron transport resistance in the TiO_2 film, while R_{ct} stands for the charge transfer resistance at the TiO_2/dye/electrolyte interface. C_μ represents the capacitance of TiO_2 film, and Z_D stands for the Nernst diffusion resistance of the electrolyte. R_{Pt} and C_{Pt} stand for the charge

transfer resistance and electric double layer capacitance at the Pt/electrolyte interface, respectively.

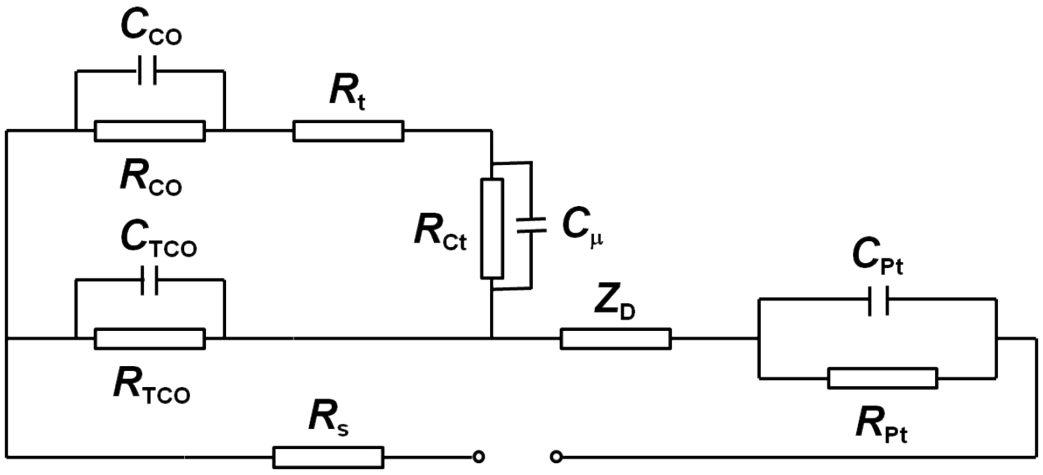

Figure S3 Equivalent circuit for the flexible DSC.