Electronic Supplementary Material (ESI) for Environmental Science: Nano.

Supporting Information

CdS nanoparticles alleviate photo-induced stress in *Geobacter* co-cultures

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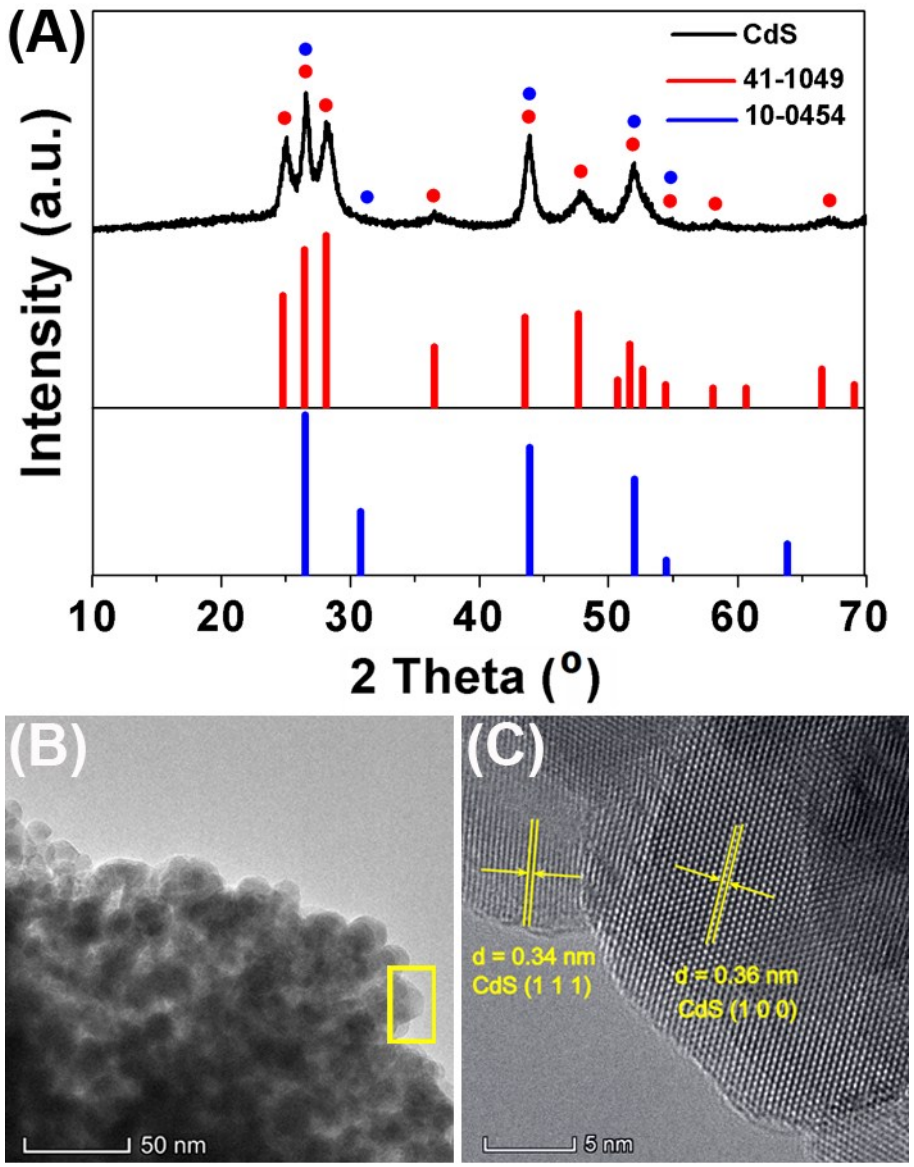

Figure S1 (A) The PXRD pattern, (B) the TEM image and (C) the HR-TEM image of CdS NPs.

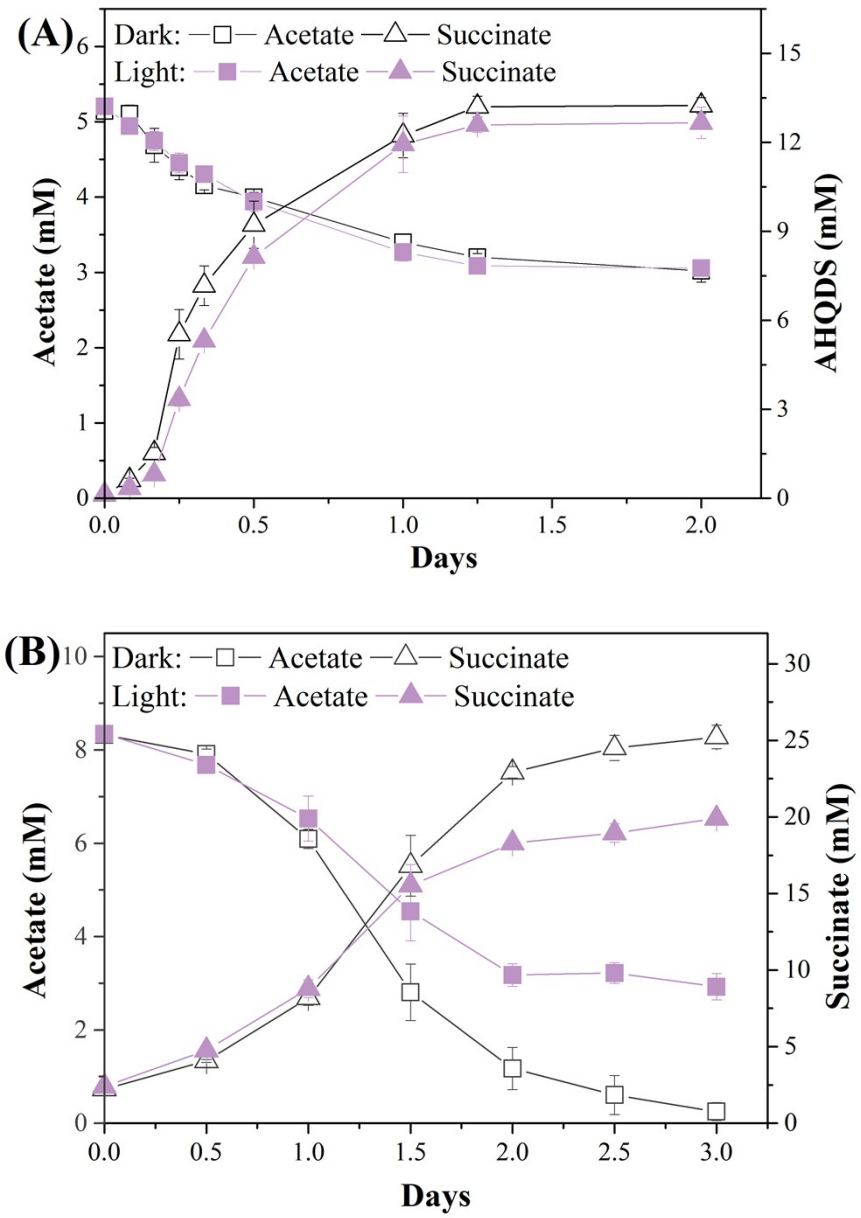

Figure S2 Ethanol/acetate consumption and AHQDS/succinate production representing the growth of (A) *G. metallireducens* with ethanol as the electron donor and AQDS as the electron acceptor and (B) *G. sulfurreducens* with acetate as the electron donor and fumarate as the electron acceptor without CdS NPs. The results are the means ± s.d. for triplicate cultures.

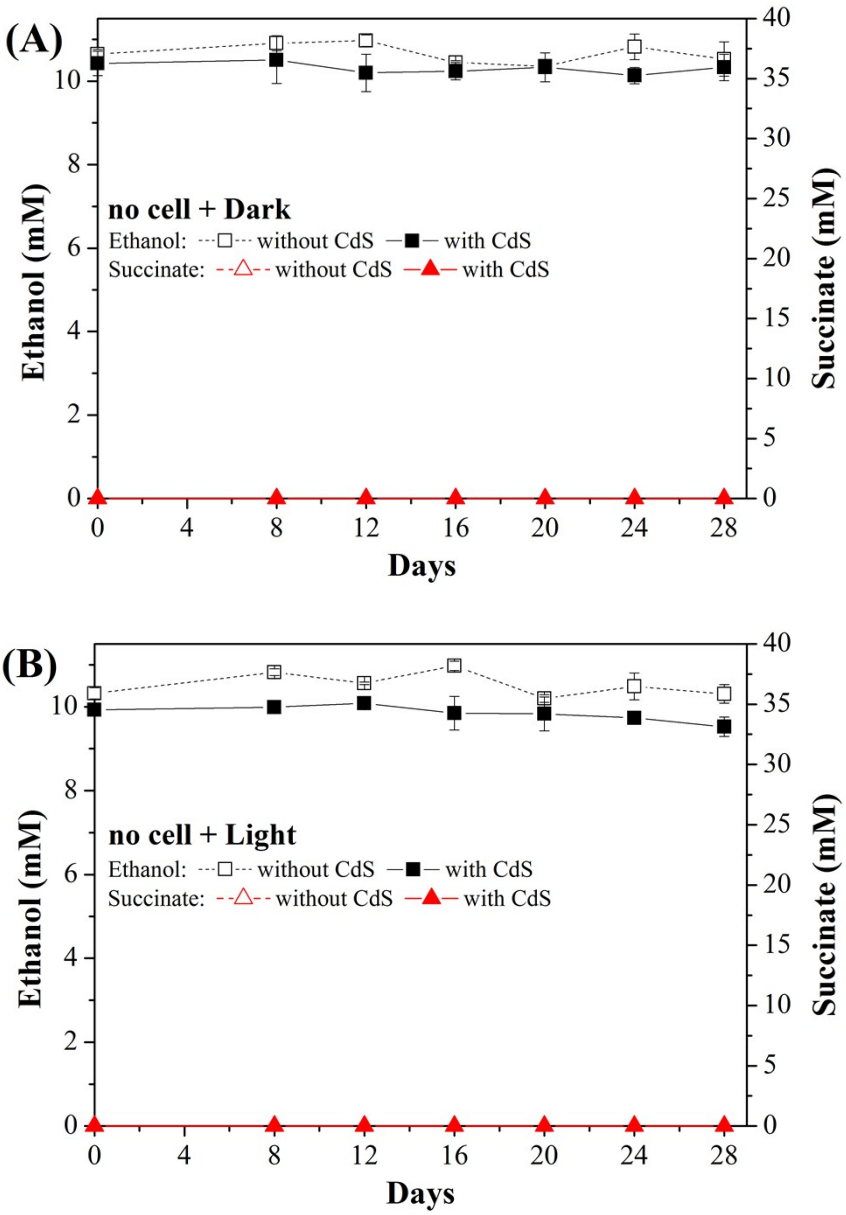

Figure S3 Ethanol consumption and succinate production in the no-cell control groups in the (A) dark and (B) light conditions. The results are the means ± s.d. for triplicate cultures.

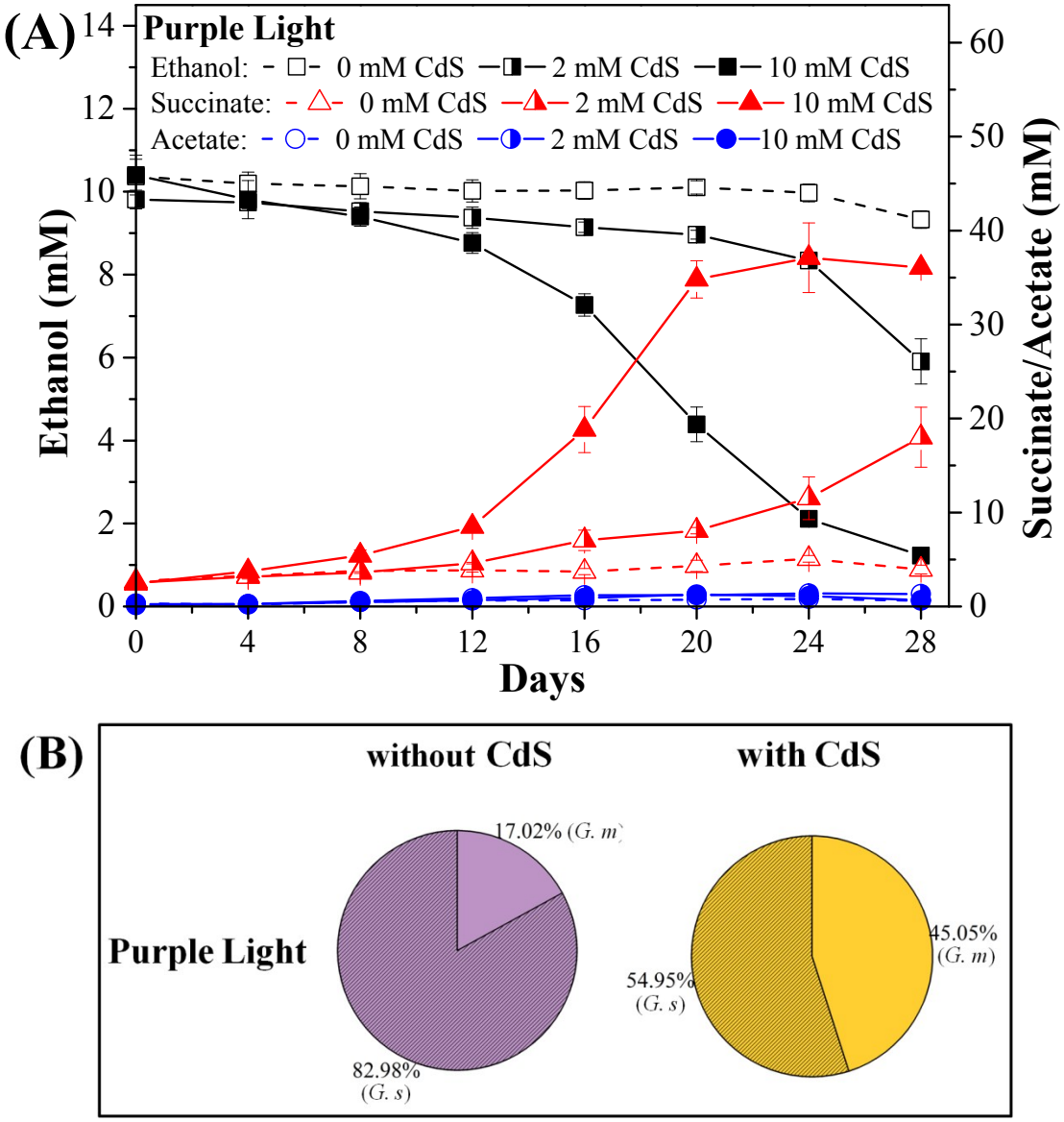

Figure S4 (A) Ethanol consumption and succinate production and (B) percentages of *G. metallireducens* and *G. sulfurreducens* on day 28 in the purple light condition. The results are the means ± s.d. for triplicate cocultures.

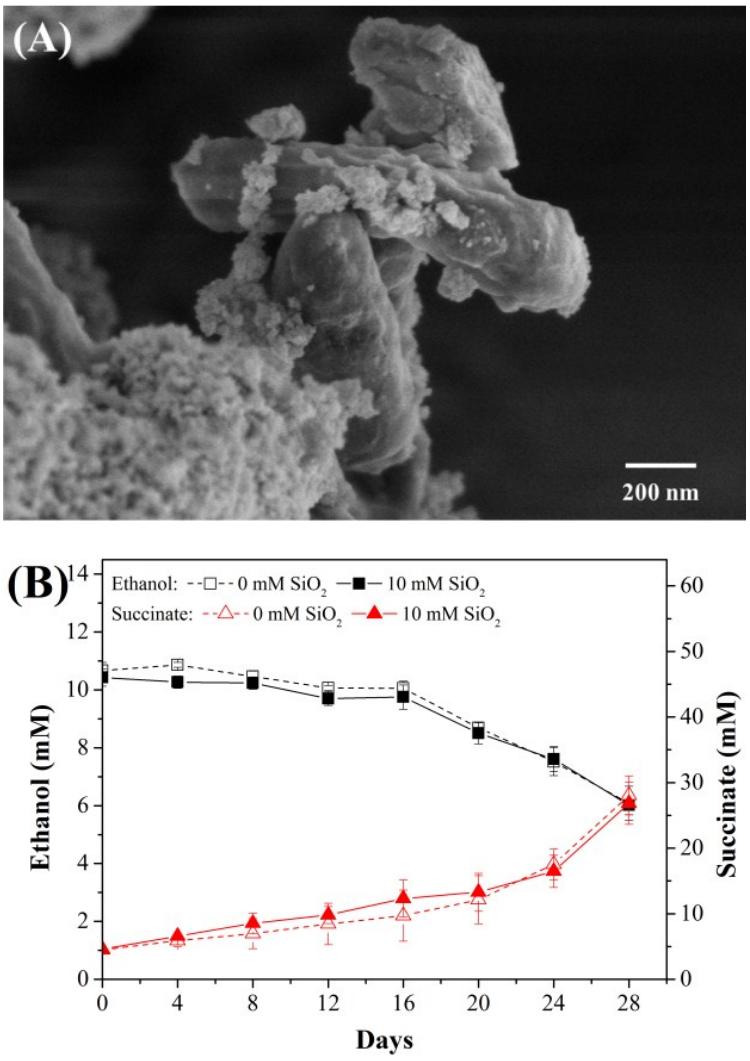

Figure S5 (A) Scanning electron micrograph and (B) ethanol consumption and succinate production of the *Geobacter* co-cultures amended with SiO_2 NPs under visible light condition. The results are the means ± s.d. for triplicate cocultures.

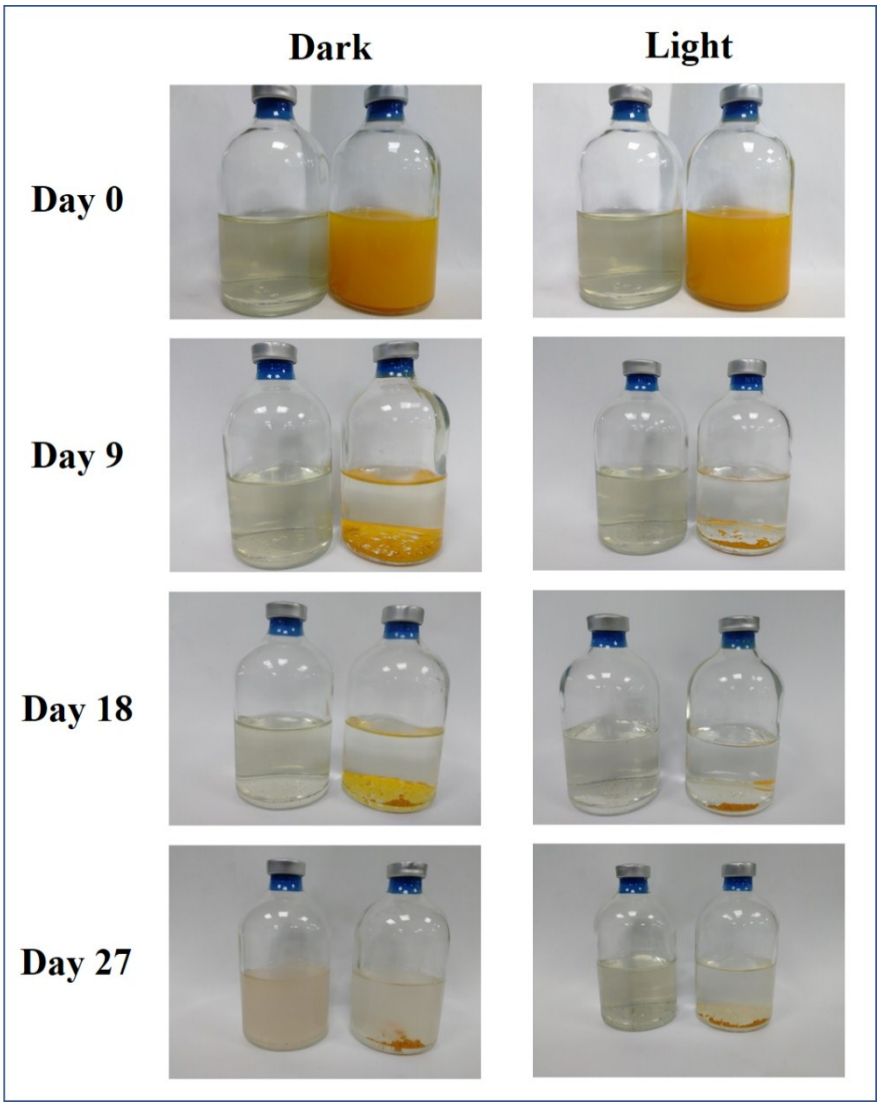

Figure S6 Appearances of *Geobacter* co-cultures in the culture bottle.