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Electronic Supplementary Information

Design of efficient dye-sensitized solar cells with patterned ZnO-ZnS

core-shell nanowire arrays photoanodes

Xiang Chen,‡a Zhiming Bai,‡a Xiaoqin Yan,a Haoge Yuan,a Guangjie Zhang,a Pei Lin,a

Zheng Zhang,^a Yichong Liu^a and Yue Zhang*ab

^aState Key Laboratory for Advanced Metals and Materials, School of Materials Science and

Engineering, University of Science and Technology Beijing, Beijing 100083, China

^bKey Laboratory of New Energy Materials and Technologies, University of Science and

Technology Beijing, Beijing 100083, China

‡These authors contributed equally to this work.

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*E-mail: yuezhang@ustb.edu.cn

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Supplementary Figure S1-S2

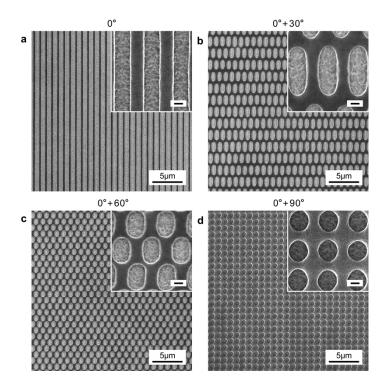


Fig. S1 Top view SEM images of the PR templates with (a) line, (b) long hexagonal, (c) hexagonal and (d) square symmetries, fabricated by using four exposure modes, including 0° , $0^{\circ}+30^{\circ}$, $0^{\circ}+60^{\circ}$ and $0^{\circ}+90^{\circ}$, respectively. Insets show the corresponding magnified SEM images, scale bars are 300 nm.

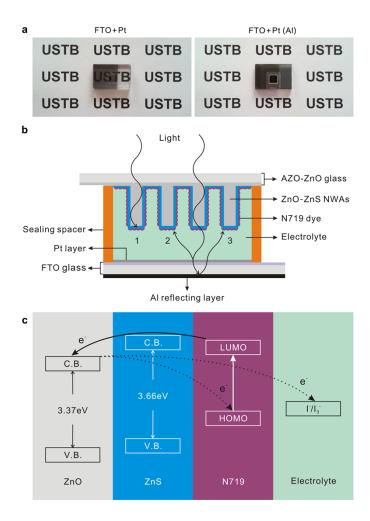


Fig. S2 (a) Optical images of the FTO-Pt cathodes with or without Al reflecting layer. (b) Schematic illustration of the presented DSSCs and light transport path. (c) Energy level diagram for the ZnO-ZnS core-shell NWAs with N719 dye in electrolyte.