## **Supplementary Information**

## Incorporation of a self-aligned selective emitter to realize highly efficient (12.8%) Si nanowire solar cells

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**Figure S1.** FETEM images of (a) porous Si at the NW tip, (b) tiny Ag NPs, and (c) dense Si at the bottom of a NW.





Figure S2. Reflectance spectra of planar and selective-emitter NW cells.

**Figure S3.** Schematics of (a) planar, (b) selective-emitter-NW, and (c) conventional NW solar cells used to measure contact resistivity using the transmission line model.

