

Supporting Information

Modal characteristics in a single-nanowire cavity with a triangular cross-section

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Figures S1-S3

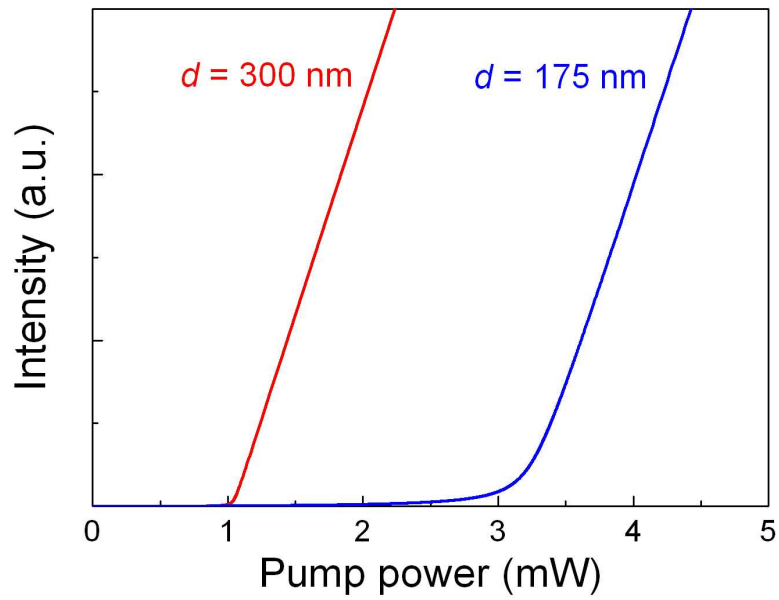


Figure S1. Light in vs. light out obtained from the rate equation analysis. The TE-like mode at $d = 300$ nm (red) has ~ 3.1 times lower threshold than the TE-like mode at $d = 175$ nm (blue).

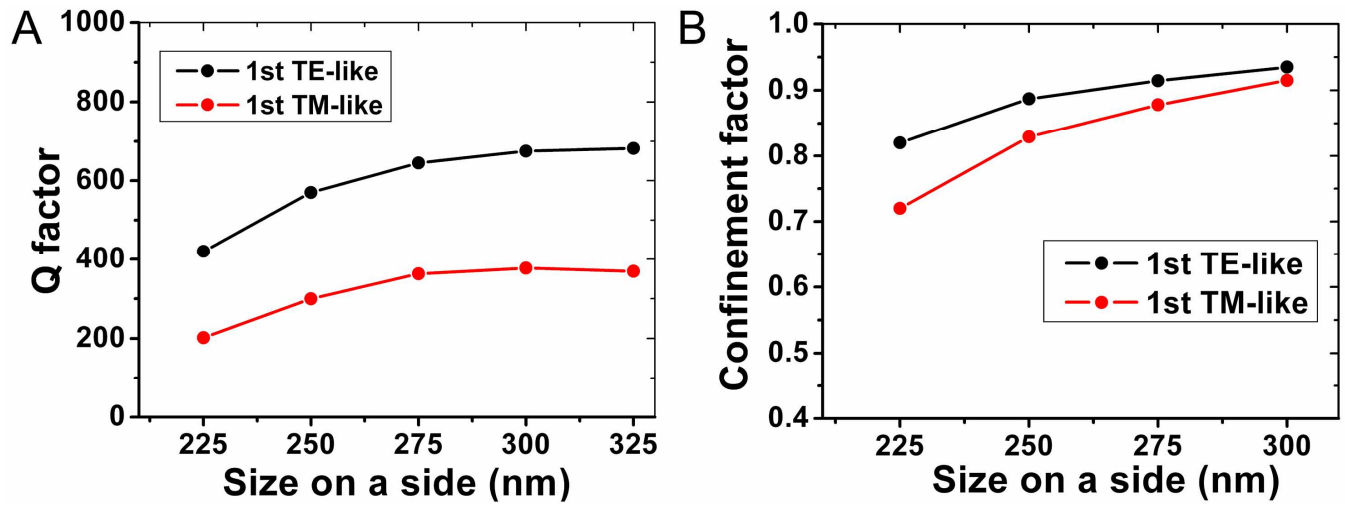


Figure S2. *Q* and confinement factors of the TE-like and the TM-like modes in a nanowire cavity located on SiO₂ substrate. (A) *Q* factor versus nanowire size on a side. (B) Confinement factor versus nanowire size on a side.

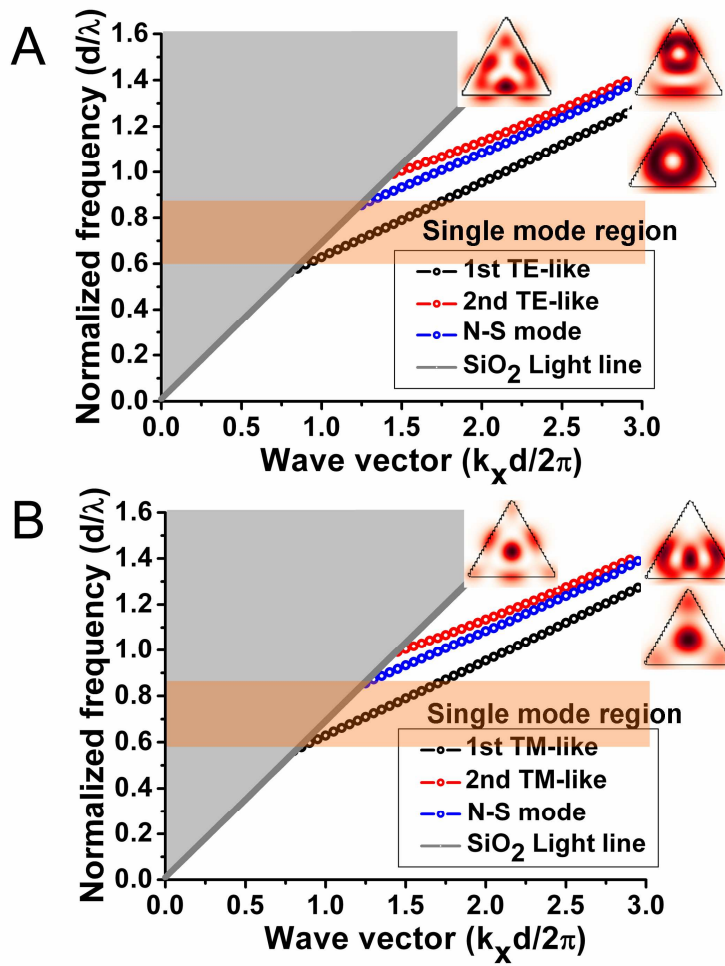


Figure S3. Dispersion curves in a nanowire cavity located on a SiO₂ substrate. Single-mode regions are shown in (A) the TE-like and (B) the TM-like modes. N-S mode stands for nanowire-substrate mode.