Figure S1. XRD results for (a) branched, (b) un-branched, and (c) commercial rutile TiO$_2$ (ICSD-9161).

Figure S2. (a) TEM image of multi-branched nanorod observed along the {111} direction of the trunk. (b), and (c) HRTEM images obtained from the upper big branch and the right-lower part of trunk in Fig. S2a, respectively. Inset in Fig. S2a presents corresponding simulation; taking a red arrow as the upper big branch and the lattice as the trunk.

Figure S3. (a) TEM image of multi-branched nanorod observed along the {10-1} direction of the right branch. (b), and (c) Electron diffraction patterns obtained from the right branch and trunk in Fig. S3a, respectively. Inset in Fig. S3a presents corresponding simulation; taking a blue arrow as the trunk and the lattice as the right branch.] See DOI: 10.1039/b000000x/