Supplementary Information:

Inorganic Nanotubes Formation through the Synergic Evolution of Dynamic Template and Metallophosphate: From Vesicle to Nanotube

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Fig. S1 XRD patterns of the sample synthesized at 383 K for 2 days with mixed organoamines (~9.0/1.0 of C<sub>12</sub>H<sub>25</sub>NH<sub>2</sub>/C<sub>16</sub>H<sub>33</sub>NH<sub>2</sub>). (a) small angle XRD (SAXRD), (b) wide angle XRD (WAXRD).

Fig. S2 IR spectra of the nanotubes after hydrothermal treatment of 2 days. The strong signals at 2850 and 2920 cm<sup>-1</sup> correspond to the CH<sub>2</sub> groups of the organoamines.
**Fig. S3** TG/DTA curves of the nanotubes synthesized at 383 K for 2 days with the mixed organoamines (C$_{12}$H$_{25}$NH$_2$/C$_{16}$H$_{33}$NH$_2$ = 9/1).

**Fig. S4** Optical microscope images of the vesicle intermediates during the process of slow addition of the organoamines (magnification times: 1000×): (a) 4 h; (b) 6 h.
**Fig. S5** XRD patterns of the sample synthesized at 383 K for various periods of time in the synthesis process with mixed organoamines (~9.0/1.0 of C_{12}H_{25}NH_{2}/C_{16}H_{33}NH_{2}) and hydrothermal treatment. (a) SAXRD, (b) WAXRD.

**Fig. S6** TEM images of the resultant samples hydrothermally treated at 383 K for 2 days with the precursors obtained under varied adding rates of mixed organoamines (C_{12}H_{25}NH_{2}/C_{16}H_{33}NH_{2} = 9/1): (a) immediately; (b) 1 ml/min; (c) 0.1 ml/min; and (d) 0.025 ml/min.