**Supplementary Information**

**Biomimetic synthesis of aluminophosphate nanorolls induced by mixed organoamines**

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**Fig. S1** TEM images of the resultant samples hydrothermally treated at 383 K for 6 days with the precursors obtained under various adding rates of mixed organoamines (10.8/1.0 of C$_{12}$H$_{25}$NH$_2$/C$_{16}$H$_{33}$NH$_2$): (a) immediately; (b) 4 ml/min; (c) 1 ml/min; and (d) 0.1 ml/min.

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**Fig. S2** TEM images of the samples hydrothermally treated at 383 K for 6 days with the precursors using mixed organoamines in different molar ratios of C$_{12}$H$_{25}$NH$_2$/C$_{16}$H$_{33}$NH$_2$: (a) 12/1 and (b) 10/1.
Fig. S3 TEM images of the samples hydrothermally treated at 383 K for 6 days using mixed organoamines (~10.8/1.0 of C$_{12}$H$_{25}$NH$_2$/C$_{16}$H$_{33}$NH$_2$) with the precursors obtained at: (a) 353 K; (b) 343 K; (c) 333 K and (d) 323 K.

Fig. S4 The left shows the XRD pattern of the precursor obtained after the mixed organoamine (~10.8/1.0 of C$_{12}$H$_{25}$NH$_2$/C$_{16}$H$_{33}$NH$_2$) adding at 323 K but before hydrothermal treatment. The right shows the IR spectra of the sample after hydrothermal treatment of 6 days. The strong signals at 2850 and 2920 cm$^{-1}$ correspond to the CH$_2$ groups of organoamines.
**Fig. S5** TG/DSC curves of the nanorolls synthesized at 383 K for 6 days with mixed organoamines (~10.8/1.0 of C\textsubscript{12}H\textsubscript{25}NH\textsubscript{2}/C\textsubscript{16}H\textsubscript{33}NH\textsubscript{2}).

**Fig. S6** The chemical structure of organoamines / reaction scheme.