An Electronic Supplementary Information (ESI)

Preparation of double-layered nanosheets containing pH-responsive polymer networks in the interlayers and their conversion into single-layered nanosheets through cleavage of cross-linking points

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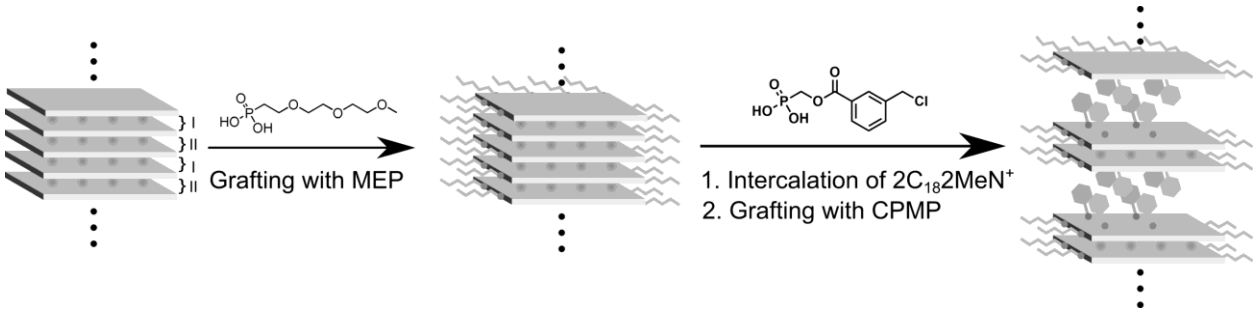

Fig. S1 Schematic image of grafting reaction of hexaniobate with MEP and CPMP.

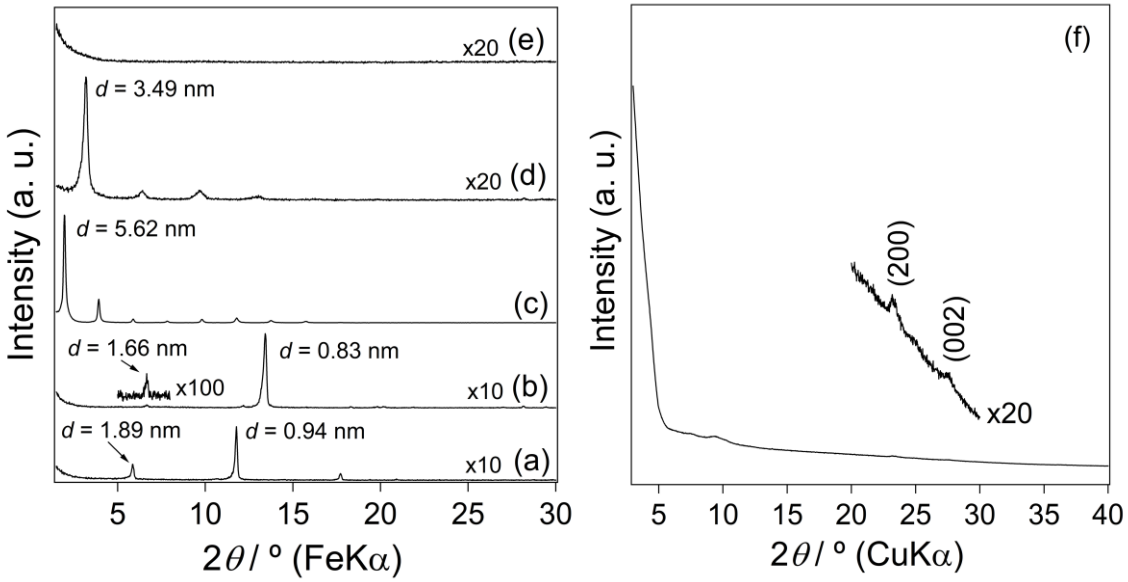

Fig. S2 XRD patterns of (a) $K_4Nb_6O_{17}\cdot 3H_2O$, (b) MEP_NbO, (c) $2C_{18}2MeN$_NbO, (d) CPMP_NbO, (e) PNB_NbO with FeKα radiation and (f) PNB_NbO with CuKα radiation.

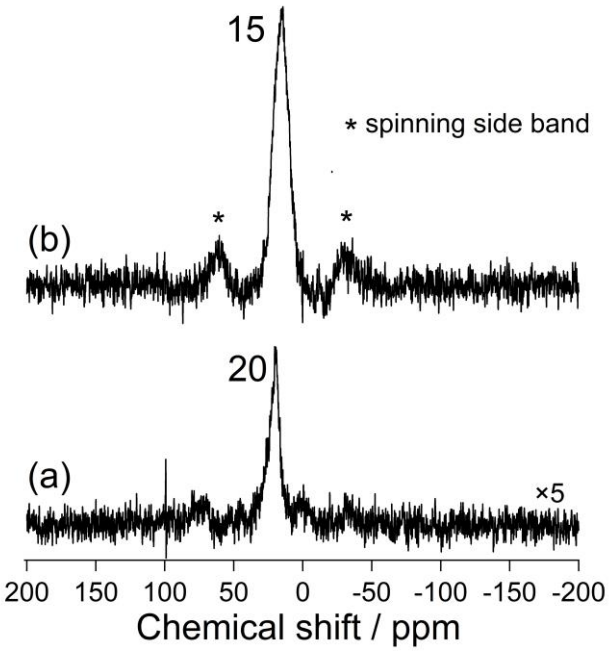

Fig. S3 Solid-state ^{31}P NMR spectra of (a) MEP_NbO and (b) CPMP_NbO.

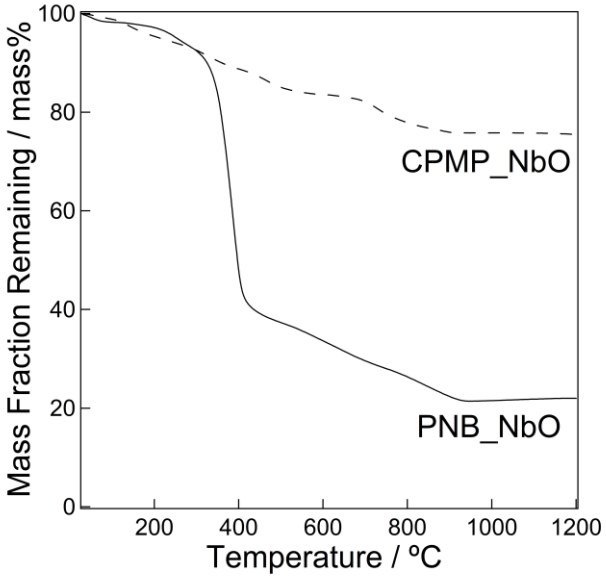

Fig. S4 TG curves of CPMP_NbO and PNB_NbO.

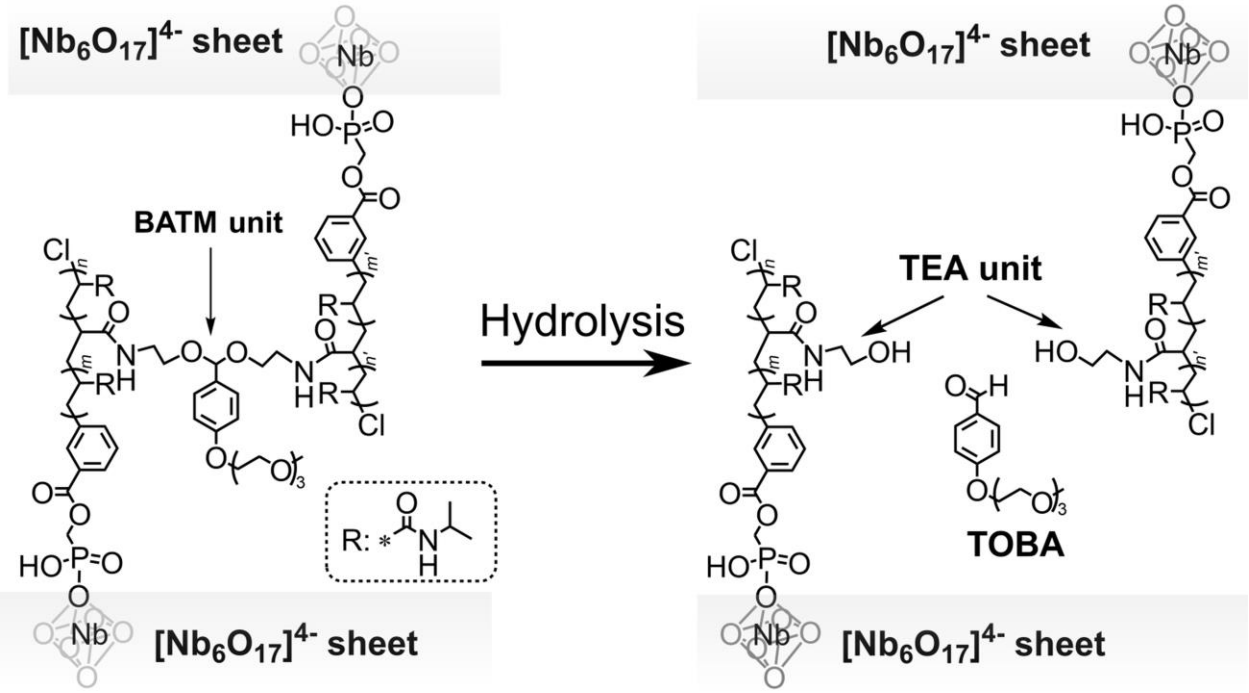

Fig. S5 The expected hydrolysis of TBA_PNB@pH4_NbO.

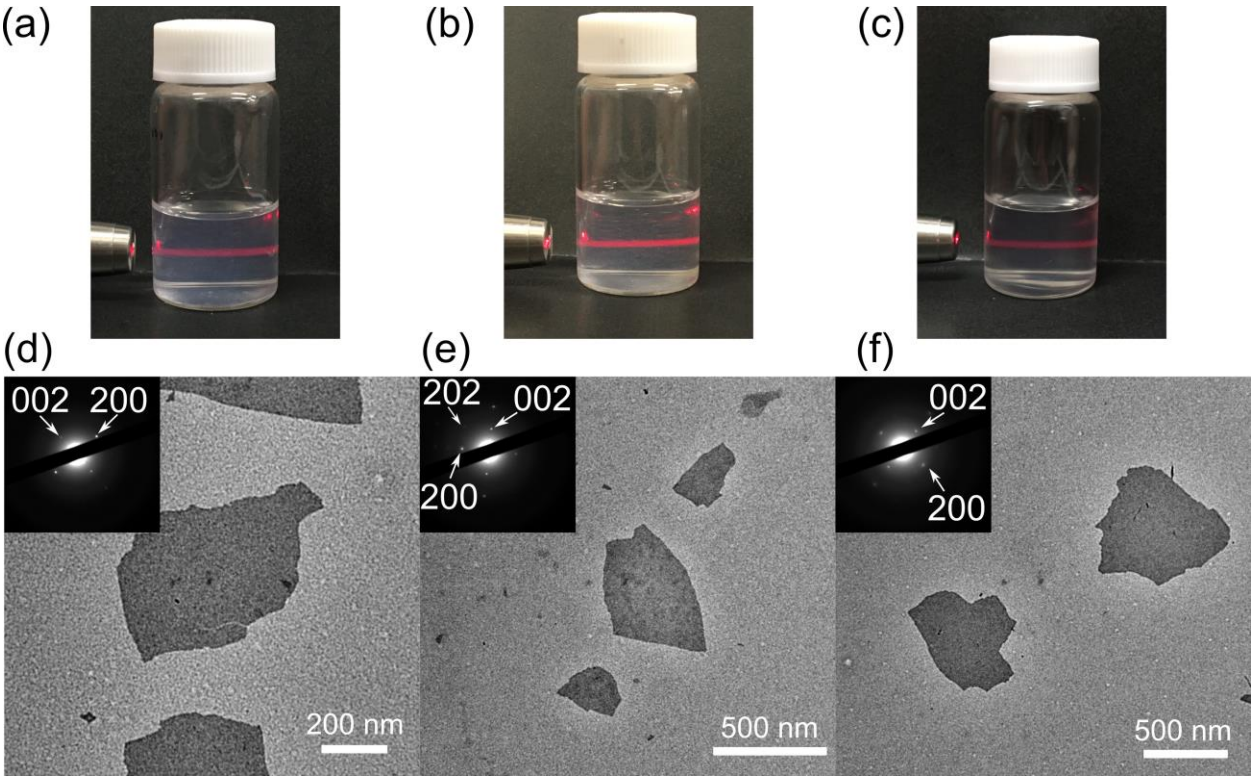

Fig. S6 Photographs of colloidal dispersions with Tyndall scattering of (a) PNB@pH4_NbO, (b) TBA_PNB_NbO and (c) TBA_PNB@pH4_NbO, and TEM images and electron diffraction patterns of (d) PNB@pH4_NbO, (e) TBA_PNB_NbO and (f) TBA_PNB@pH4_NbO.

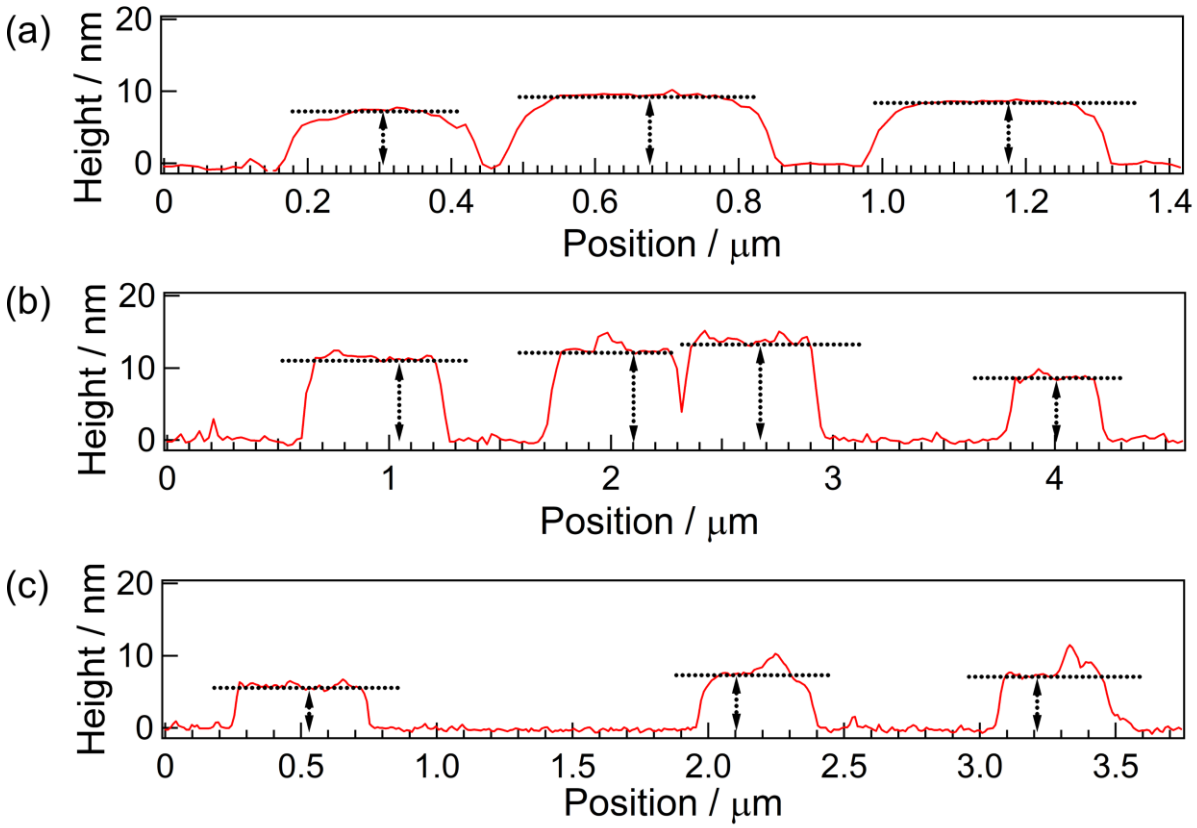

Fig. S7 The enlarged cross-section profiles of (a) PNB@pH4_NbO, (b) TBA_PNB_NbO and (c) TBA_PNB@pH4_NbO in Fig. 7 (a), Fig. 8 (a) and (c), respectively.