## **Supporting Information**

- **Fig. 1** Solution <sup>13</sup>C NMR spectra of tricitrato titanates (D<sub>2</sub>O). **1**:  $K_2[Ti(H_2cit)_3]\cdot 4H_2O$  (down), **2**:  $KMg_{\frac{1}{2}}[Ti(H_2cit)_3]\cdot 6H_2O$  (middle), **3**:  $(NH_4)Mg_{\frac{1}{2}}[Ti(H_2cit)_3]\cdot 6H_2O$  (middle), **4**:  $Ba[Ti(H_2cit)_3]\cdot 4H_2O$  (up)
- **Fig. 2**: DTA and TG diagrams of  $Ba[Ti(H_2cit)_3] \cdot 4H_2O 4$
- Fig. 3: X-ray diffractogram of Ba[Ti(H<sub>2</sub>cit)<sub>3</sub>]·4H<sub>2</sub>O 4 heated at 700°C for two hours

*Physical Measurements*. Infrared spectra were recorded as Nujol mulls between KBr plates on a Nicolet 360 FT-IR spectrometer. Elemental analyses were performed with an EA 1100 elemental analyzer; <sup>1</sup>H-NMR and <sup>13</sup>C-NMR spectra were recorded on Varian UNITY 500 and 300 NMR spectrometers. The TG-DTA measurements were conducted on a Netzsch STA 409EP thermal analysis system with a heating rate 5°C/min over the 25 – 700°C range. The powder diffractogram was recorded on a Rigaku D/Max-C powder diffractometer equipped with Cu-K $\alpha$  radiation.

Figure 1



Figure 2



Figure 3

