

Synthesis of self-standing mesoporous nanocrystalline titania-phosphorus oxide composite films

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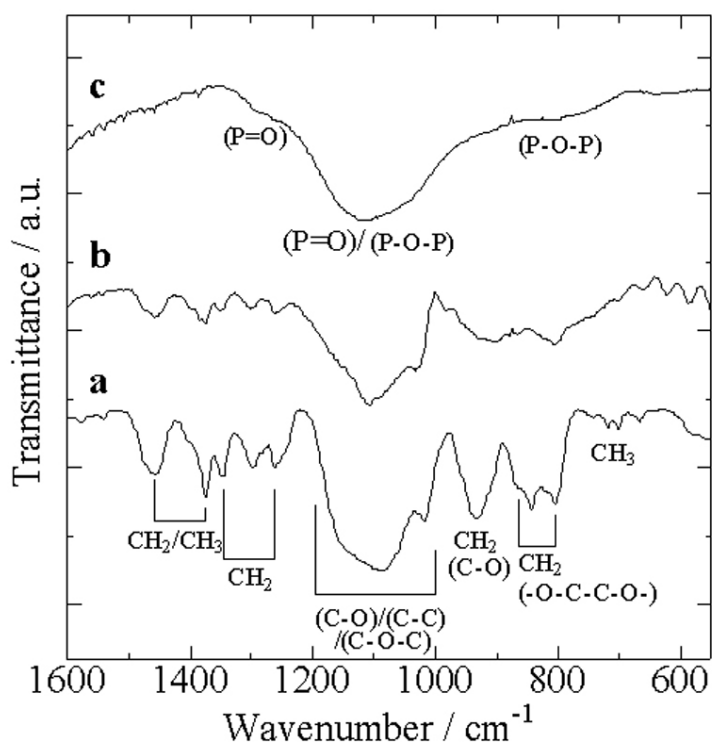


Fig. S1. FT-IR spectra obtained from pure P123 (a) and self-standing thick films of mesoporous TiO₂-P₂O₅ before (b) and after (c) calcination. Typical bands from the template (a) disappeared after calcination at 400°C (c), although some adsorption bands remained from the glass P₂O₅ phase.

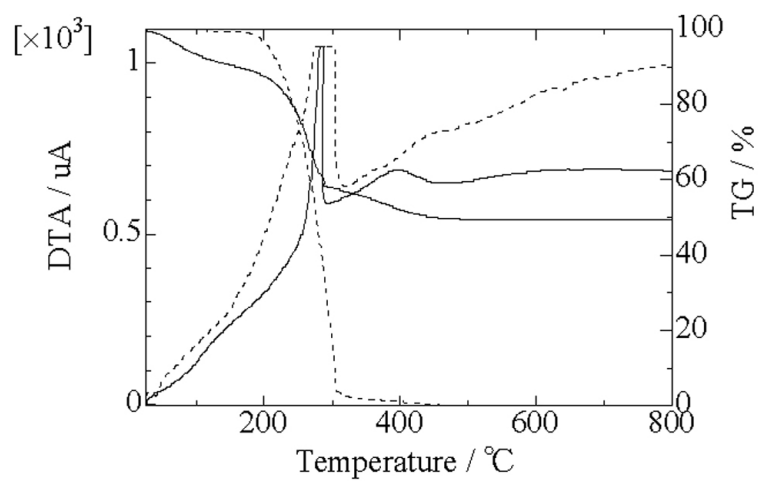


Fig. S2. TG-DTA trace of P123 (dashed line) and self-standing thick films of TiO₂-P₂O₅ (solid line). Almost all of the P123 could be removed by calcination at 400°C.



Fig. S3. Optical images of a self-standing 85- μm -thick film of mesostructured $\text{TiO}_2\text{-P}_2\text{O}_5$ after drying at 70°C in air for 20 h (EISA was performed at $15^\circ\text{C}/80\%RH$ in air for 48 h).