Electronic Supplementary Material (ESI) for CrystEngComm.

Table S1. The ratios of Fe/Ti in P-FIOs and flower-like Fe-glycolate from each P-FIOs (ICP-AES).

Fe precursor (mg)	P-FIOs (mol/mol)	Fe-glycolate (mol/mol)
125	14:86	94:6
250	25:75	95:5
500	40:60	97:3
750	50:50	98:3

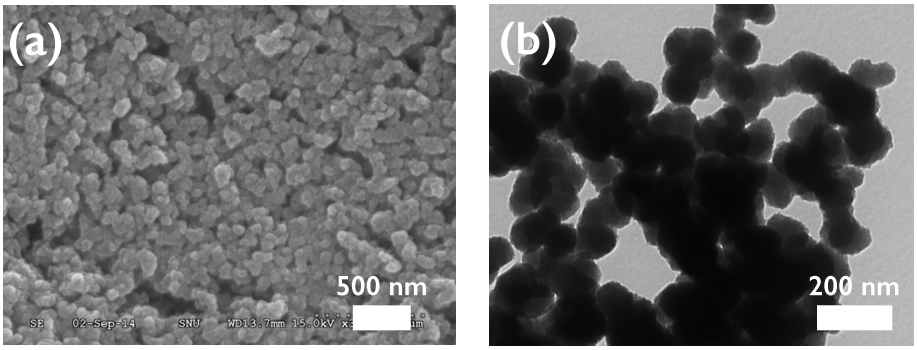

Fig. S1. (a) FE-SEM and (b) TEM images of P-FIOs.

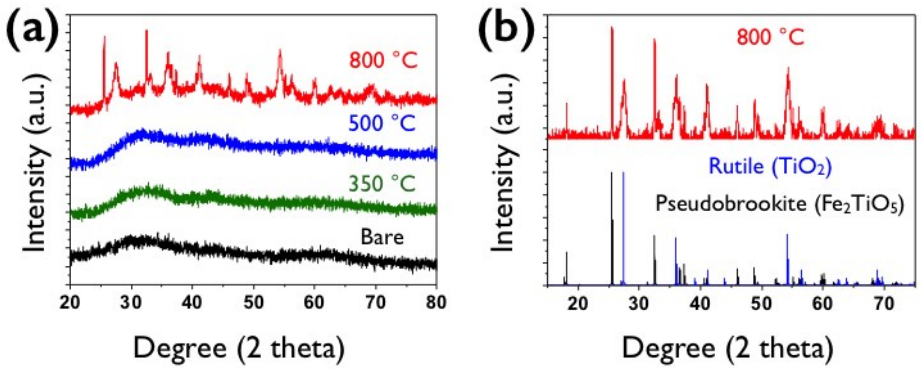

Fig. S2. XRD patterns of (a) P-FIOs from various annealing conditions and (b) P-FIOs annealed at 800 °C.

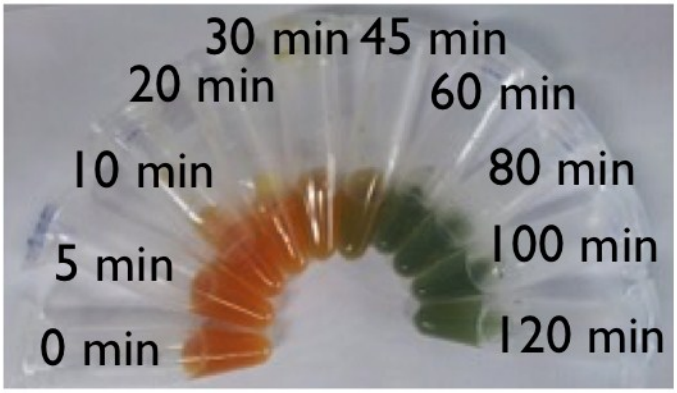

Fig. S3. Color-changes of P-FIOs with increasing reaction time.

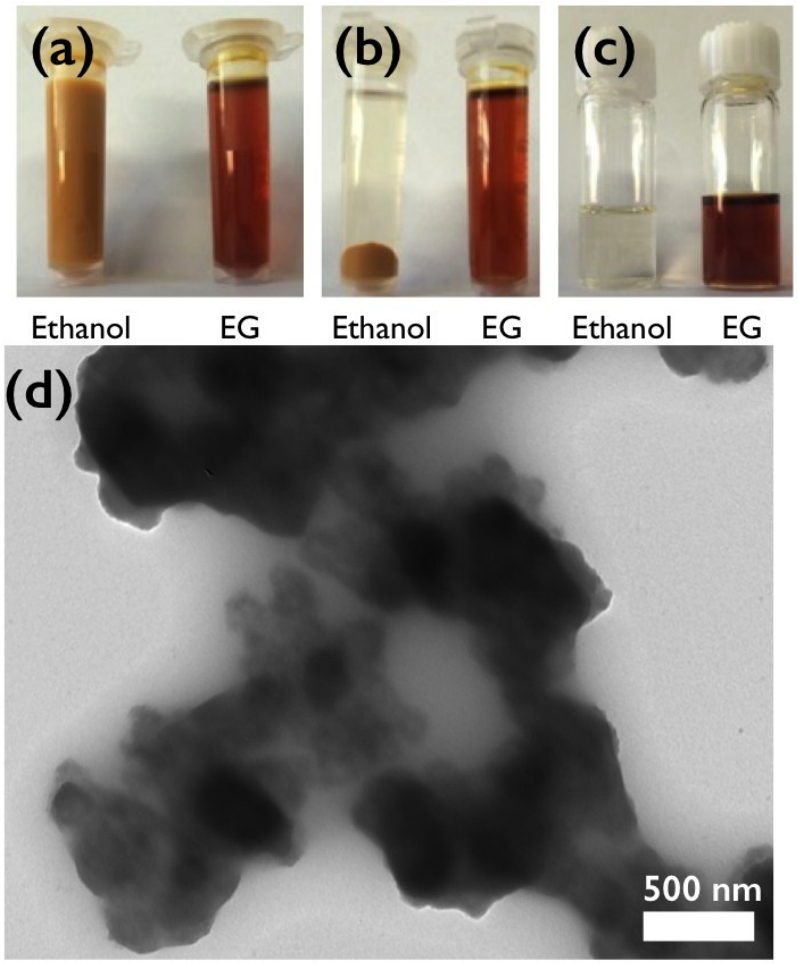

Fig. S4. Photographs of P-FIOs in ethanol and EG (a) after overnight stirring, (b) after centrifugation, (c) Photograph of the separated supernatant solution after centrifugation and (d) TEM image of P-FIOs in EG.

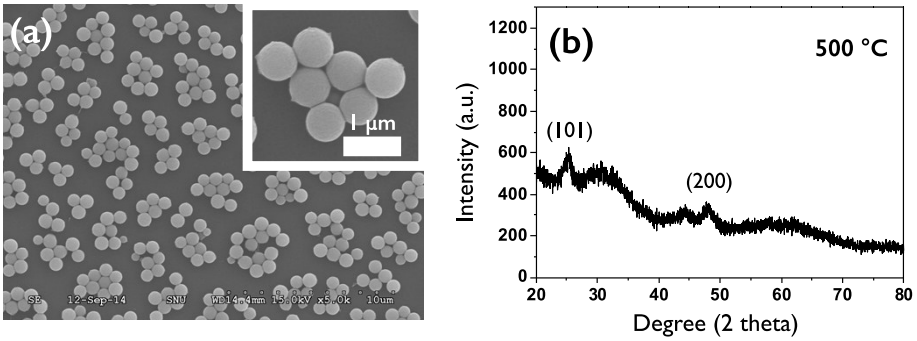

Fig. S5. (a) FE-SEM image of titania nanoparticles and (b) XRD pattern of titania nanoparticles after annealing at 500 °C.

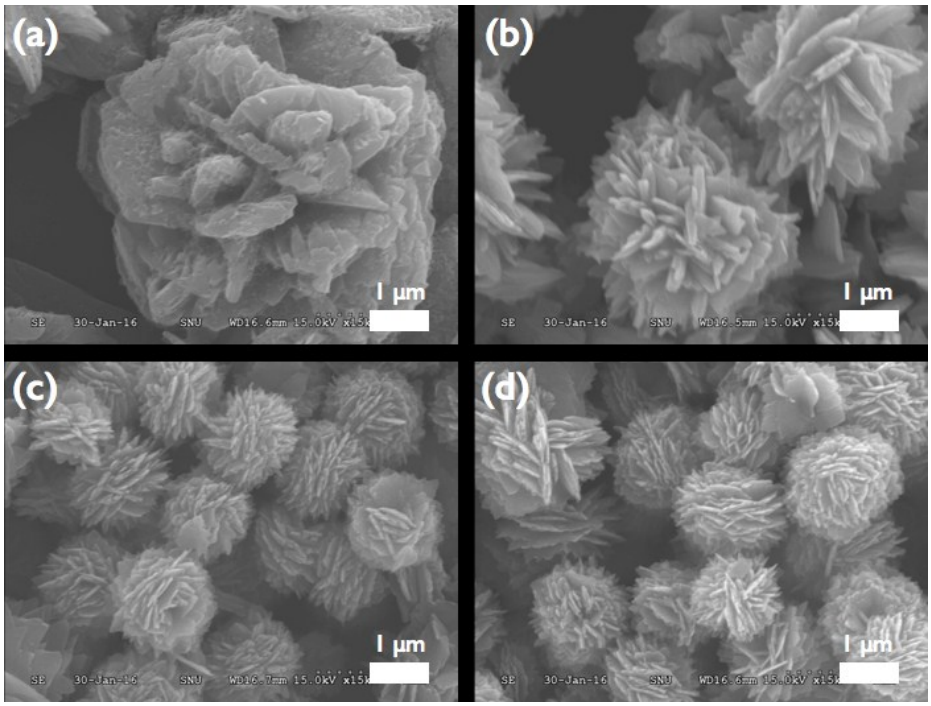

Fig. S6. FE-SEM images of flower-like particles using P-FIOs of (a) 14:86, (b) 25:75, (c) 40:60, and (d) 50:50 Fe/Ti ratio (mol/mol).

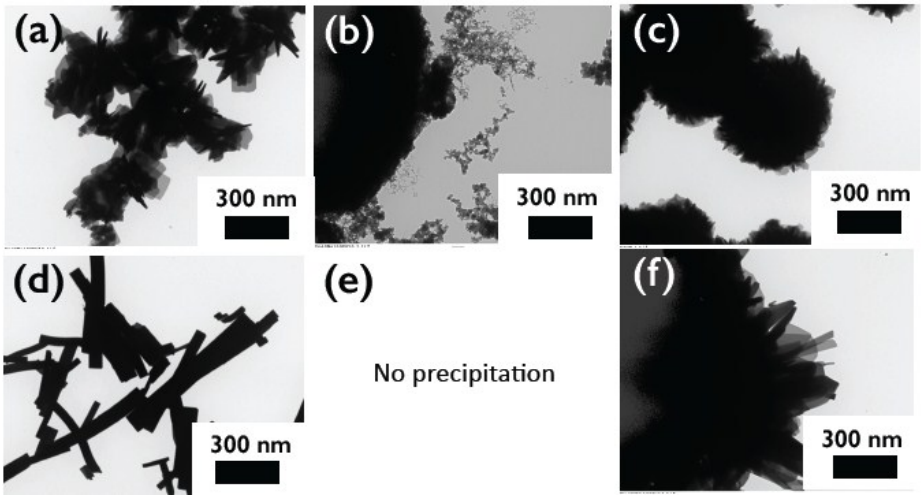

Fig. S7. TEM images of non-flower-like hierarchical structures from iron chloride hexahydrate used as a precursor; (a) 30 and 100 mg, (b) 60 and 100 mg, (c) 120 and 100 mg, (d) 250 and 100 mg, (e) 750 and 100 mg, and (f) 300 and 500 mg of iron chloride hexahydrate and sodium acetate, respectively.

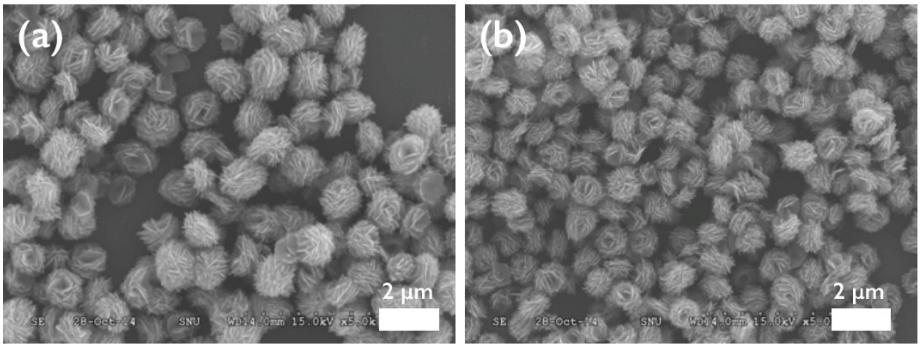

Fig. S8. Fe-glycolate particles synthesized using (a) 0.05 mL and (b) 0.1 mL of additional water.

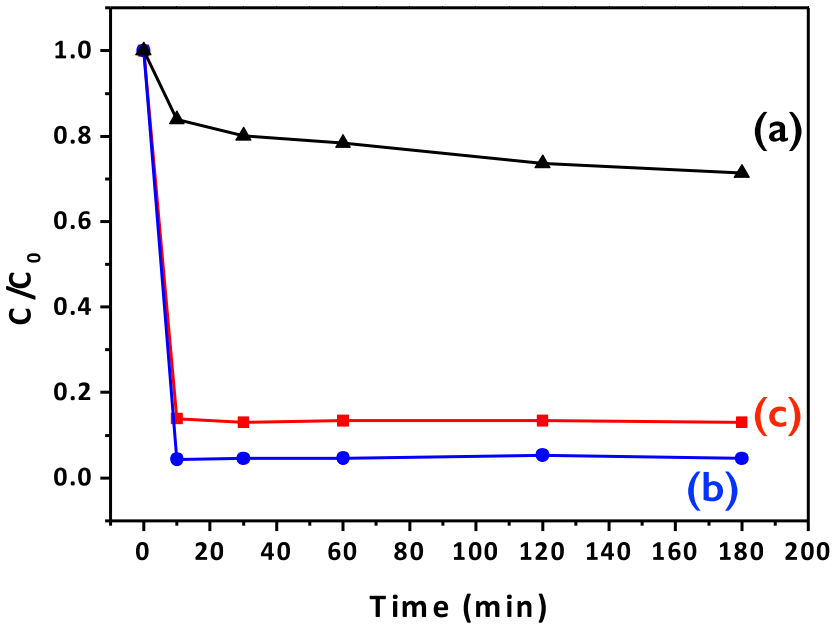

Fig. S9. Adsorption rate of arsenate ions on M-FIOs from (a) Fe-glycolate, (b) hydrolyzed particles in water, and (c) hydrolyzed particles in ammonia solution.