

Supporting information

Facile Template-Free Fabrication of Aluminum-Organophosphorus Hybrid Nanorods: Formation Mechanism and Enhanced Luminescence Property

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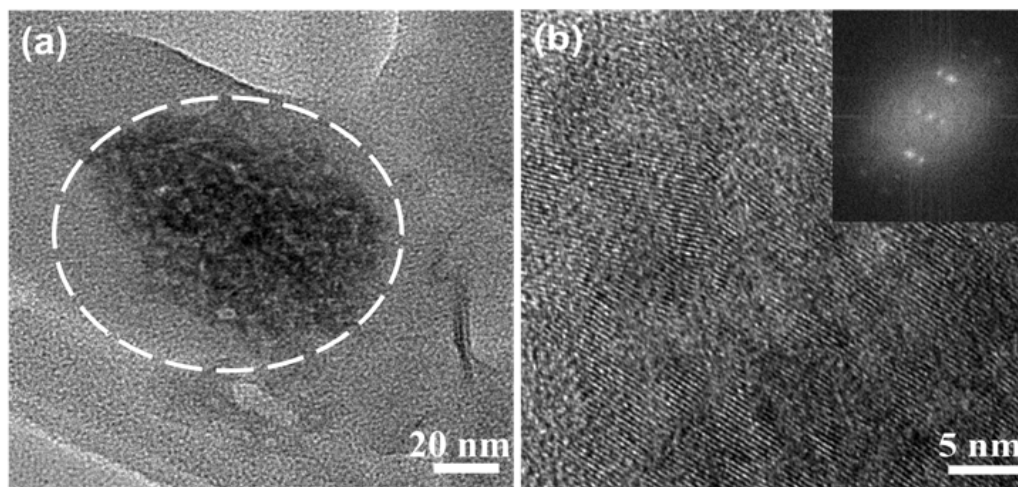


Figure S1 HRTEM images of boehmite phase (a) and fine crystalline structure of boehmite phase (b).

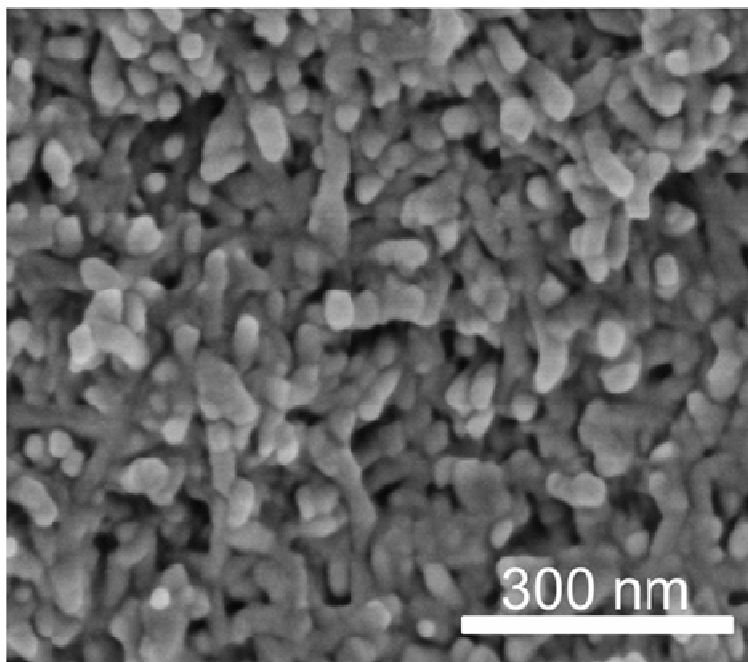


Figure S2 Higher resolution SEM images of ultra-small sized nanoparticles and nanorods in the initial stage.

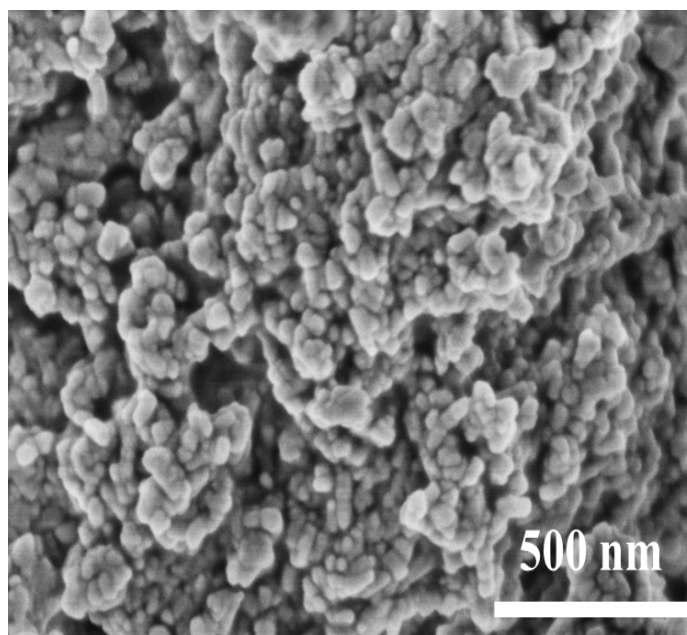


Figure S3 SEM image of APHs prepared by ambient pressure reaction.

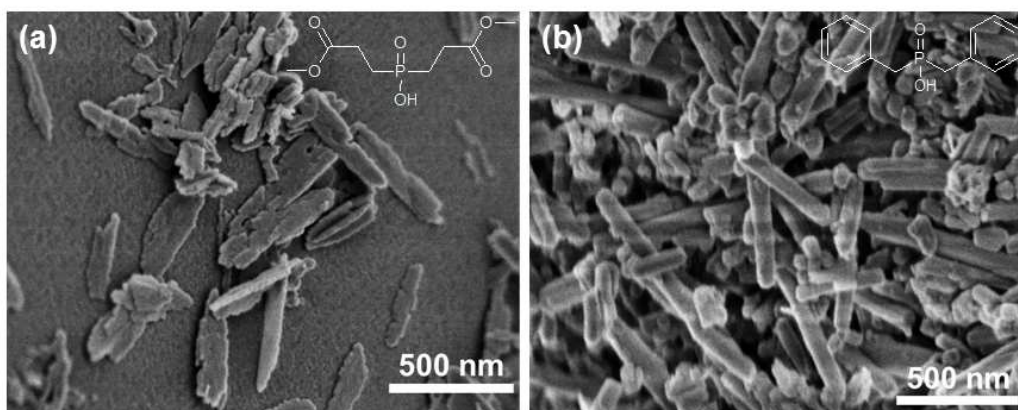


Figure S4 SEM images of APHs produced by reacting ATH with alkyl phosphinic acid (BMOPA) (a) and with dibenzylphosphinic acid (DBPA) (b).

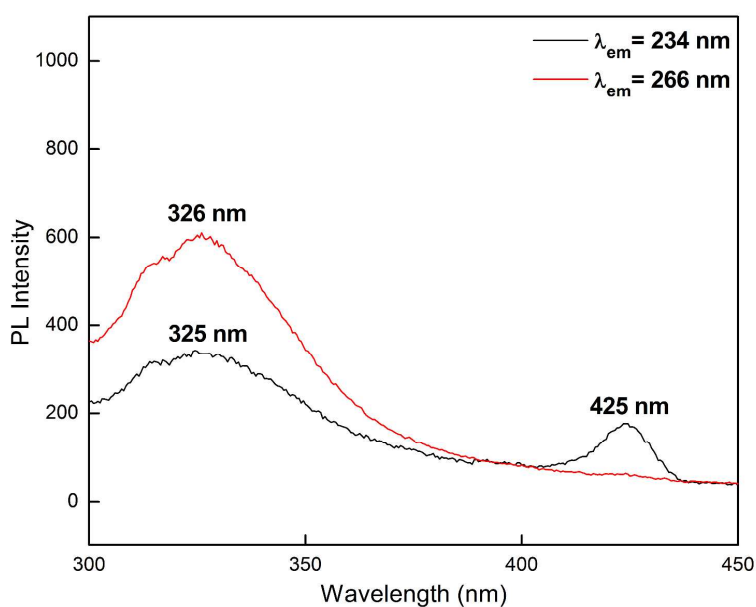


Figure S5 The emission peak of APHNRs in CH_2Cl_2 solution (concentration: 0.125 g/L) by utilizing an excitation at 266 nm instead at 234 nm.

Table S1 BET surface area of APHNRs prepared under several reacting conditions

	APHNRs samples			
Reacting conditions	2 h/160 °C/ 0.167 mol/L	12 h/160 °C/ 0.167 mol/L	12 h/120 °C/ 0.167 mol/L	12 h/160 °C/ 0.334 mol/L
BET surface area (m^2/g)	110.0	113.0	100.0	101.6

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