

Figure S1. XRD patterns of (a) APW-2 and BTSE-modified mesostructured AlPO-based materials obtained where the Si/(Al+P) molar ratios were (b) 0.25 and (c) 0.50.

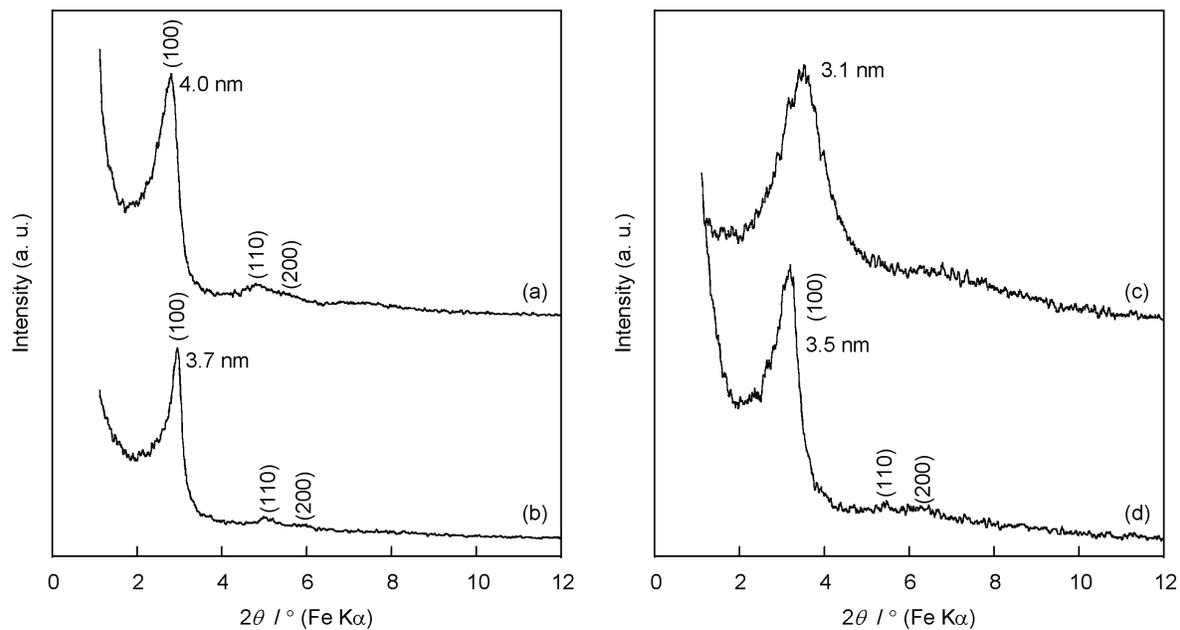


Figure S2. XRD patterns of (a), (b) BTME- and (c), (d) BTMH-modified mesostructured AlPO-based materials obtained when the amount of water was varied from (a), (c) 65.0 H₂O to (b), (d) 400 H₂O in the starting mixtures (Si/(Al+P) = 1.00).

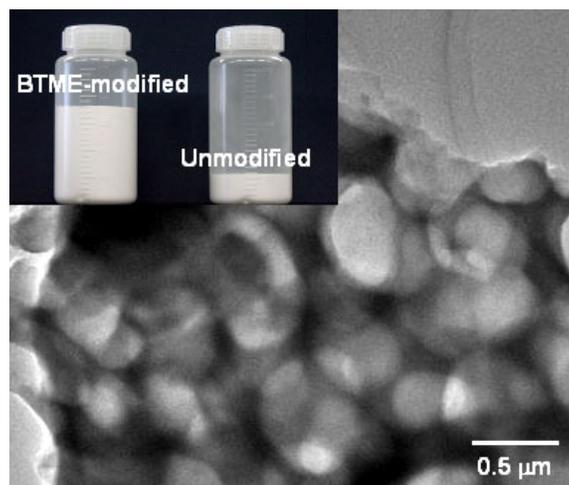


Figure S3. Photograph of powders recovered by the synthesis of the BTME-modified APW-2 ($\text{Si}/(\text{Al}+\text{P}) = 1.00$) and unmodified APW-2, and typical low magnification TEM image of the BTME-modified APW-2.

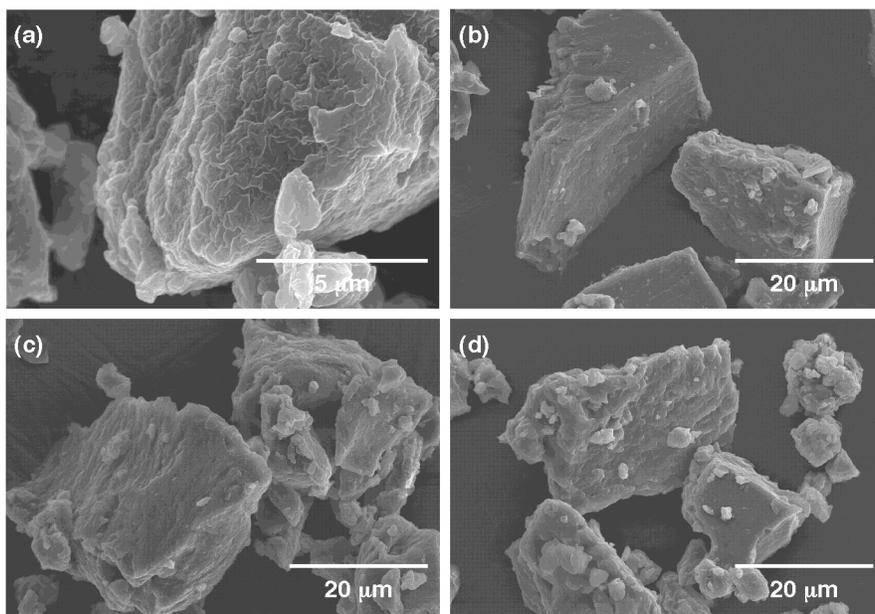


Figure S4. Typical SEM images of (a) unmodified APW-2 and the derivatives modified with (b) methyl-, (c) ethyl- and (d) butyltrimethoxysilanes.

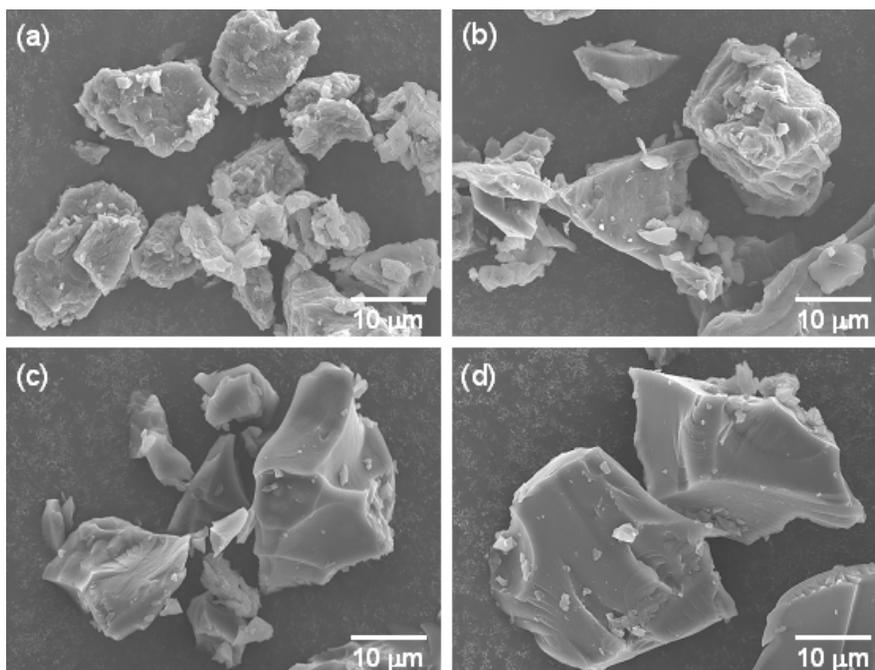


Figure S5. Typical SEM images of BTMH-modified mesostructured AIPO-based materials obtained where the Si/(Al+P) molar ratios were (a) 0.25, (b) 0.50, (c) 0.75, and (d) 1.00.