

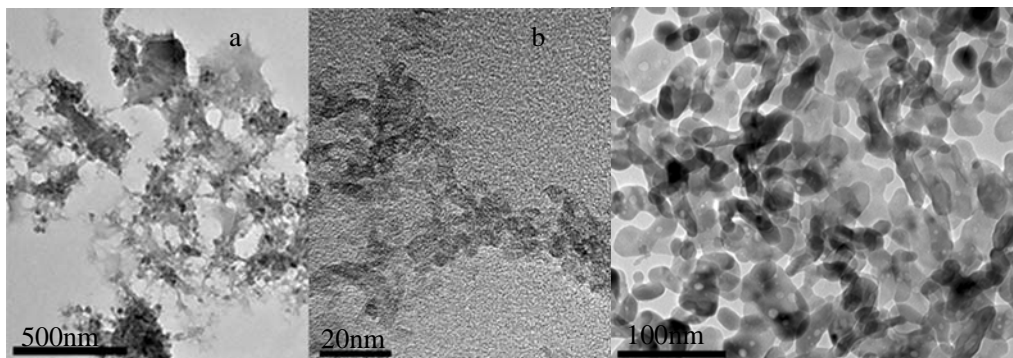
## 网状多级孔结构氧化铁的制备、合成机理及其光催化性质

范海滨 张东凤\* 郭林\*  
(北京航空航天大学化学与环境学院, 北京 100191)

### **Fabrication, Formation Mechanism and the Photocatalytic Properties of Hierarchical Porous Hematite Networks**

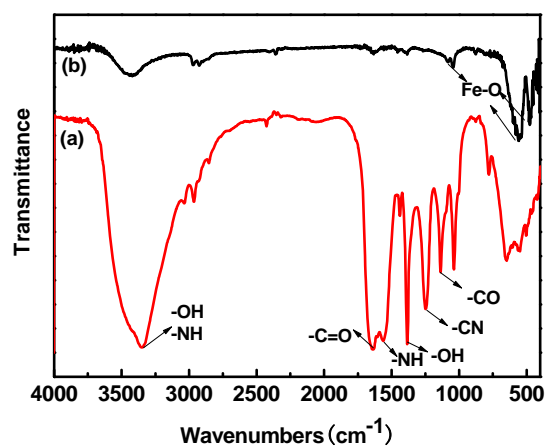
FAN Hai-Bin ZHANG Dong-Feng\* GUO Lin\*  
(*School of Chemistry and Environment, Beihang University, Beijing 100191, P. R. China*)

\*Corresponding authors. ZHANG Dong-Feng, Email: dfzhang@buaa.edu.cn; Tel: +86-10-82338492. GUO Lin, Email: guolin@buaa.edu.cn; Tel: +86-10-82338162.

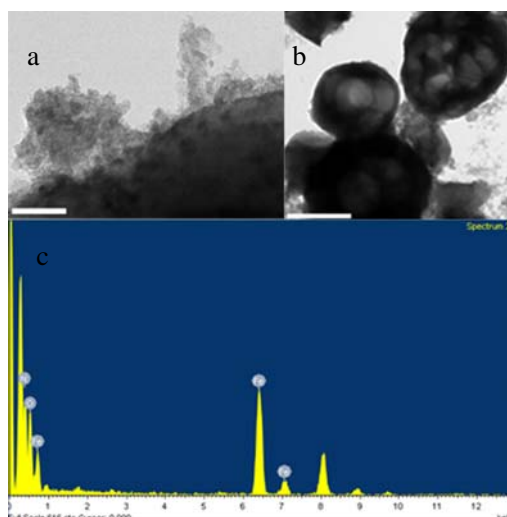


**Fig.S1 TEM images of the product obtained after aging 3 h with the addition of urea and formaldehyde**

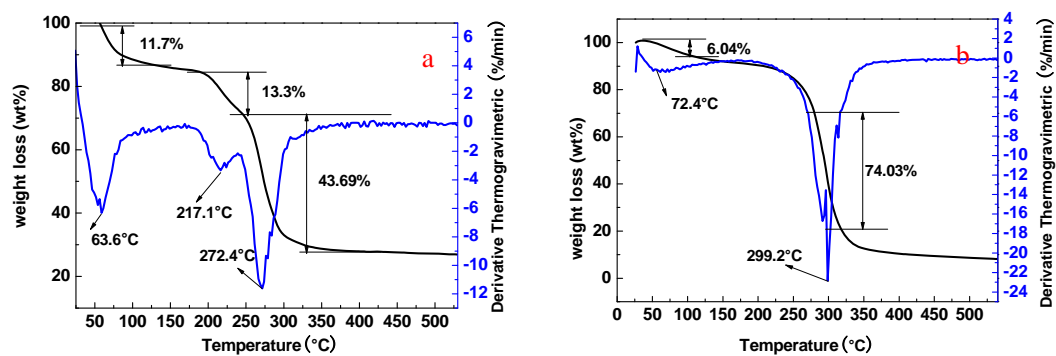
(a) as-prepared, (b) after washed several times with deionized water and ethanol, (c) after calcinated at 400 °C



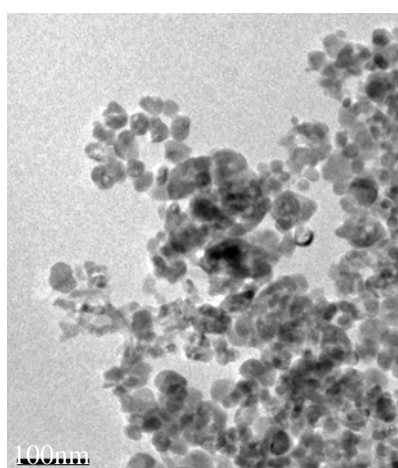
**Fig.S2 FT-IR of the product obtained after aging 3 h with the addition of urea and formaldehyde (a) before and (b) after calcinations**



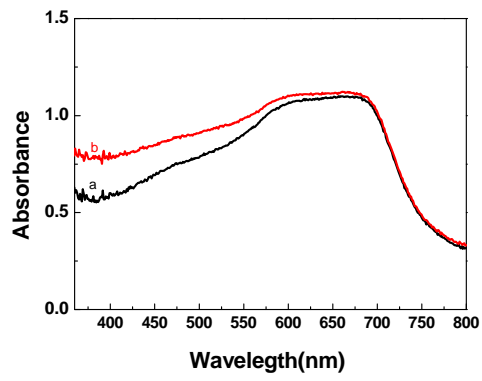
**Fig.S3** TEM and EDS analysis of products obtained after aging 6 h with the introduction of urea and formaldehyde



**Fig.S4** TG and DTG curves of (a) as-synthesized iron-based UF resins-hybrid materials and (b) UF resins obtained at the same condition without the addition of  $\text{Fe}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O}$  while the PH was adjusted to  $\sim 1$  by the addition of HCl



**Fig.S5** TEM image of CNPs



**Fig.S6 UV-Vis absorption spectra of (a) CNPs and (b) HPH**