

## Supporting Information

# Synthesis and characterization of amorphous SiO<sub>2</sub>- Fe<sub>x</sub>O<sub>y</sub> materials starting from iron sulfate for preliminary studies of CO<sub>2</sub> adsorption

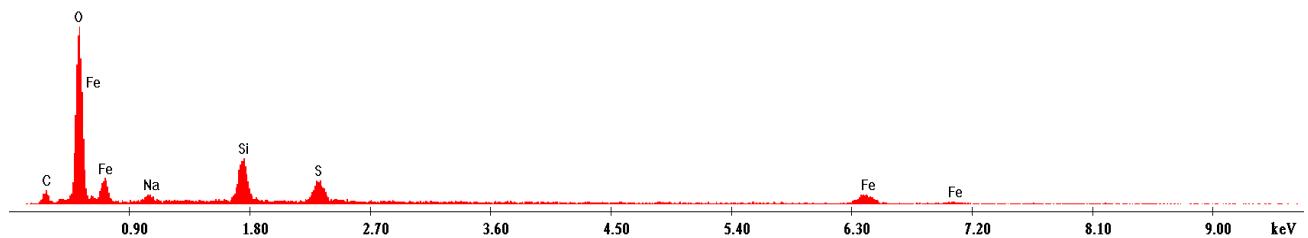
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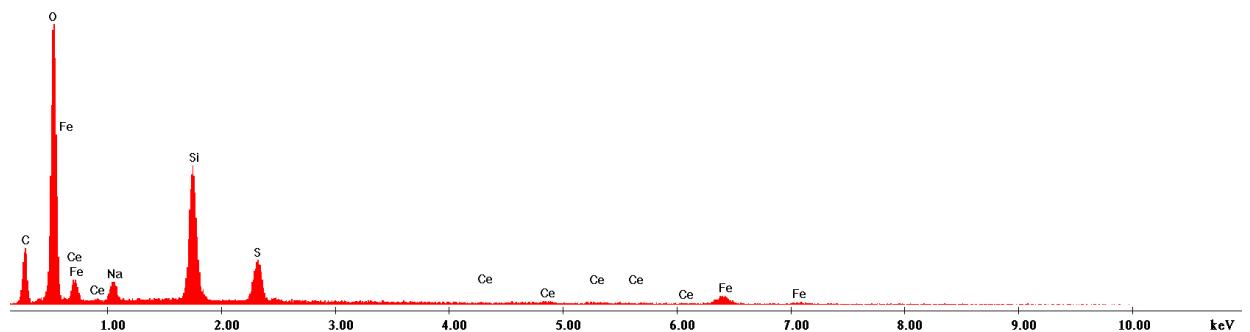
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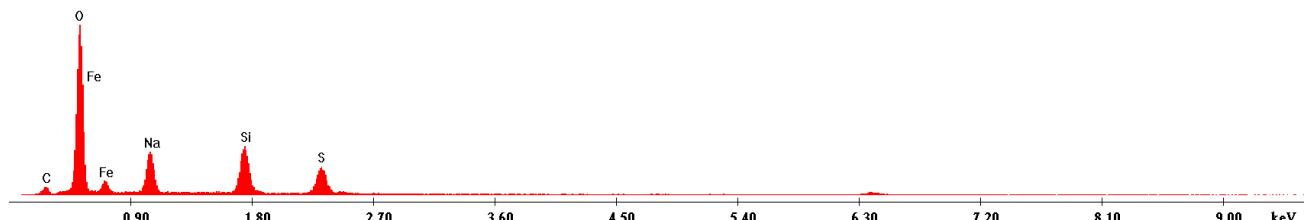
\* Correspondence: author: [alpopa\\_tim2003@yahoo.com](mailto:alpopa_tim2003@yahoo.com)



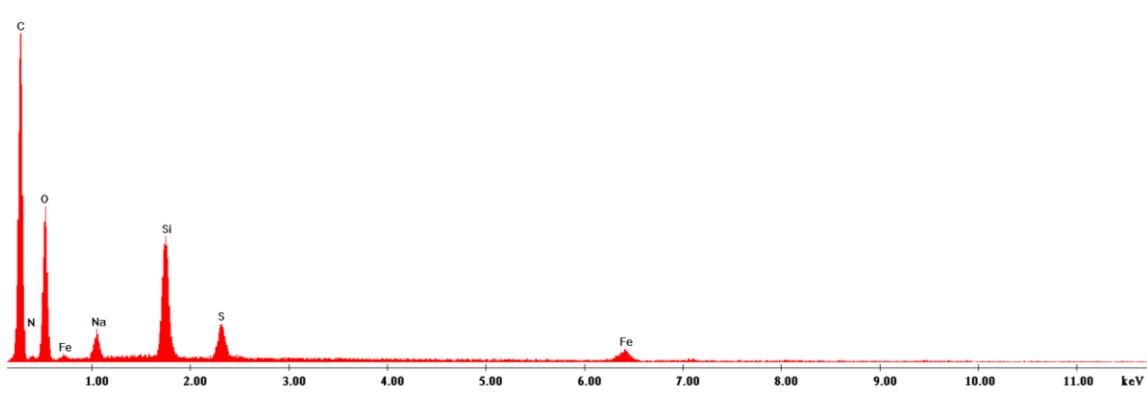
**Figure S1. a.** EDS images for the SiO<sub>2</sub>-Fe<sub>x</sub>O<sub>y</sub> sample.



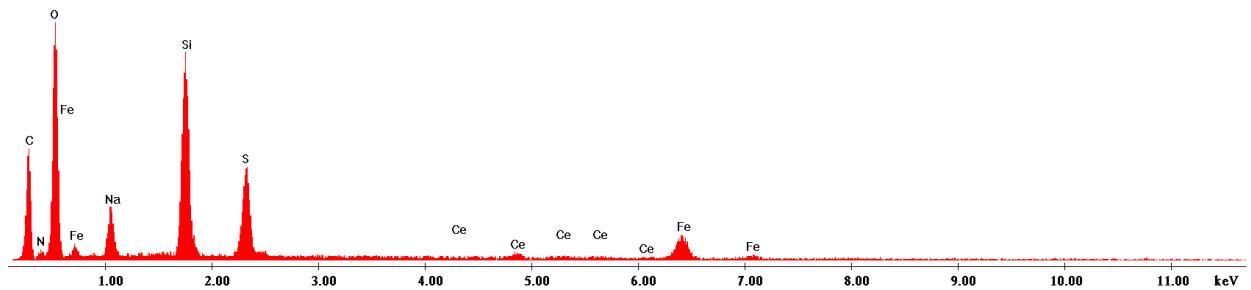
**Figure S1. b.** EDS images for the SiO<sub>2</sub>-Fe<sub>x</sub>O<sub>y</sub> -Ce sample



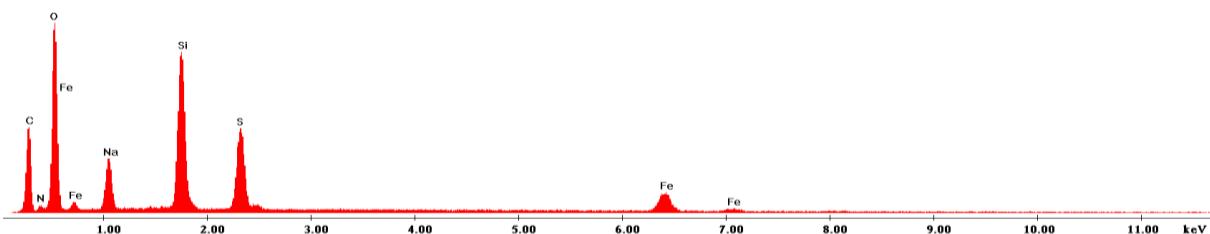
**Figure S1. c.** EDS images for the sample SiO<sub>2</sub>-Fe<sub>x</sub>O<sub>y</sub> - Li.



**Figure S2. a.** EDS images for the sample  $\text{SiO}_2\text{-Fe}_x\text{O}_y$  – APTES



**Figure S2. b.** EDS images for sample  $\text{SiO}_2\text{-Fe}_x\text{O}_y$  – Ce-APTES.



**Figure S2. c.** EDS images for the  $\text{SiO}_2\text{-Fe}_x\text{O}_y$  – Li- APTES.