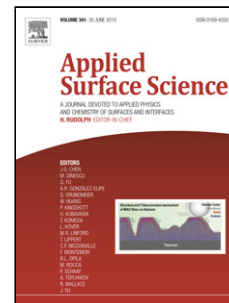


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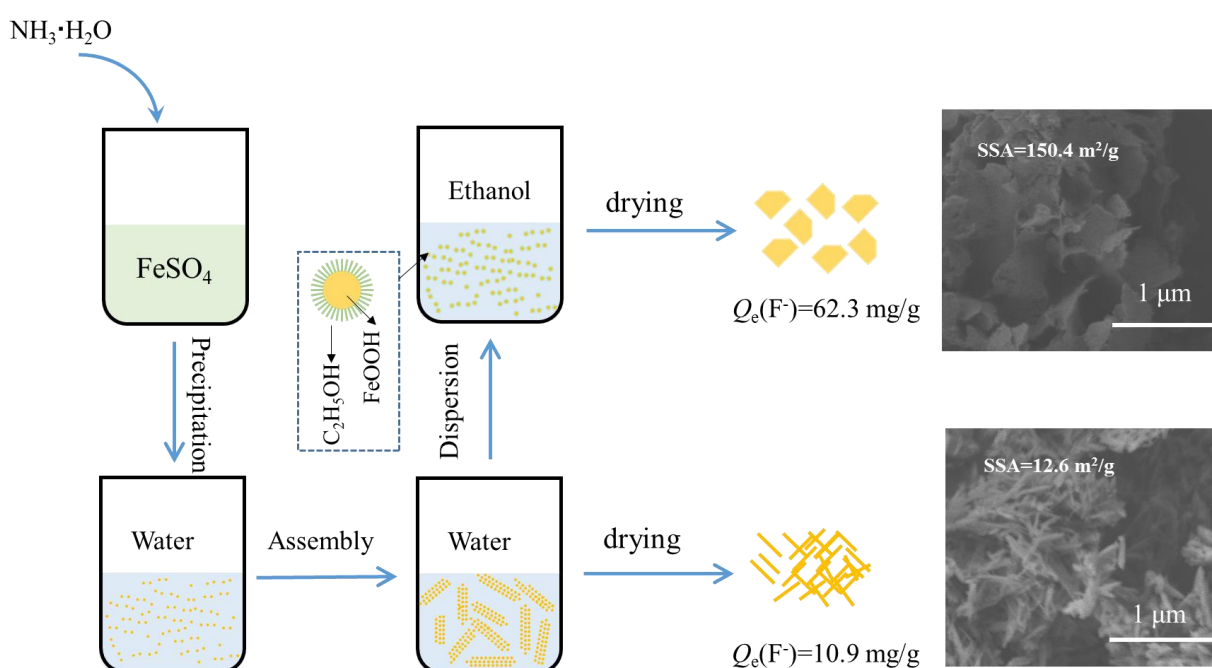
Synthesis and properties of a high-capacity iron oxide adsorbent for fluoride removal from drinking water

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Graphical abstract



Highlights:

- (1) A high-capacity iron oxide adsorbent with low cost was prepared.
- (2) Ethanol treatment changed adsorbent microstructure and inhibited crystallization.
- (3) Ethanol treatment increased surface area and adsorption capacity significantly.
- (4) Adsorption occurred by exchange of F^- with OH^- groups on adsorbent surface.
- (5) Achieved high F^- adsorption in wide pH range and in the presence of co-anions.

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