

Supporting Online Material for

Controlling Morphology and Phase of Pyrite FeS₂ Hierarchical Particles via the Combination of Structure- direction and Chelating Agents

*Leize Zhu, Beau Richardson, Jessica Tanumihardja, and Qiuming Yu**

Department of Chemical Engineering

University of Washington, Seattle, WA 98195, USA

Corresponding author:

Qiuming Yu

Department of Chemical Engineering, University of Washington

Seattle, WA 98195, USA

Tel: 01-206-543-4807; Fax: 01-206-685-3451; Email: qyu@uw.edu;

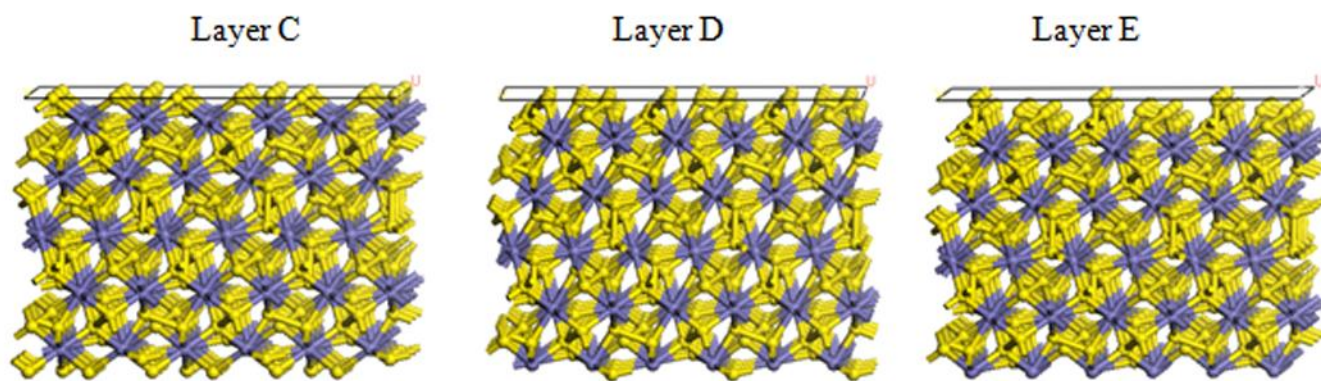


Fig. S1. Side-view of (111) surface terminated in layers C, D, and E. Blue balls are iron atoms and yellow balls are sulfur atoms.

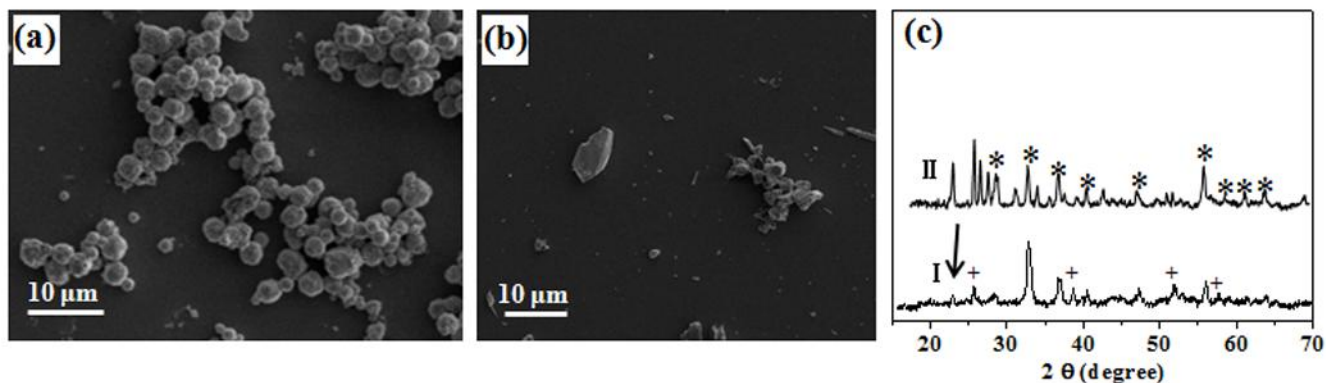


Fig. S2. SEM images of the products synthesized in the solutions with the volume ratio of en to water of 0.2 mL/19 mL (a) and 0 mL/19.2 mL (b) without the presence of PVP at 200°C for 24 hr. The XRD patterns of I and II are for the products shown in (a) and (b), respectively. The XRD peaks of marcasite FeS₂ are marked as “+” and pyrite FeS₂ are marked as “*”. The arrow indicates the peak due to other impurity.