Supporting Information

Two-Step Route to Size and Shape Controlled Gibbsite Nanoplates and the Crystal Growth Mechanism

Suyun Wang[†, ‡], Xin Zhang[†], Trent R. Graham[†], Hailin Zhang[†], Carolyn I. Pearce[§], Zheming Wang[†], Sue B. Clark[§, ‖], Wei Jiang [*‡] and Kevin M. Rosso[*†]*

[†] Physical & Computational Sciences Directorate, Pacific Northwest National Laboratory, Richland, Washington 99354, USA

[‡] School of Chemical Engineering, Nanjing University of Science and Technology, Nanjing 210094, China

[§] Energy & Environment Directorate, Pacific Northwest National Laboratory, Richland, WA, USA

[‖] The Voiland School of Chemical and Biological Engineering, Washington State University, Pullman, Washington, USA

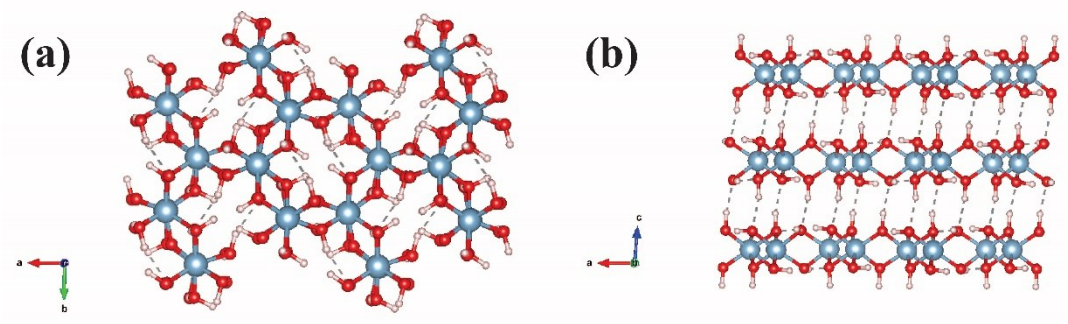

Figure S1. The crystal structure of gibbsite (a) along [001] direction and (b) along [100] direction.

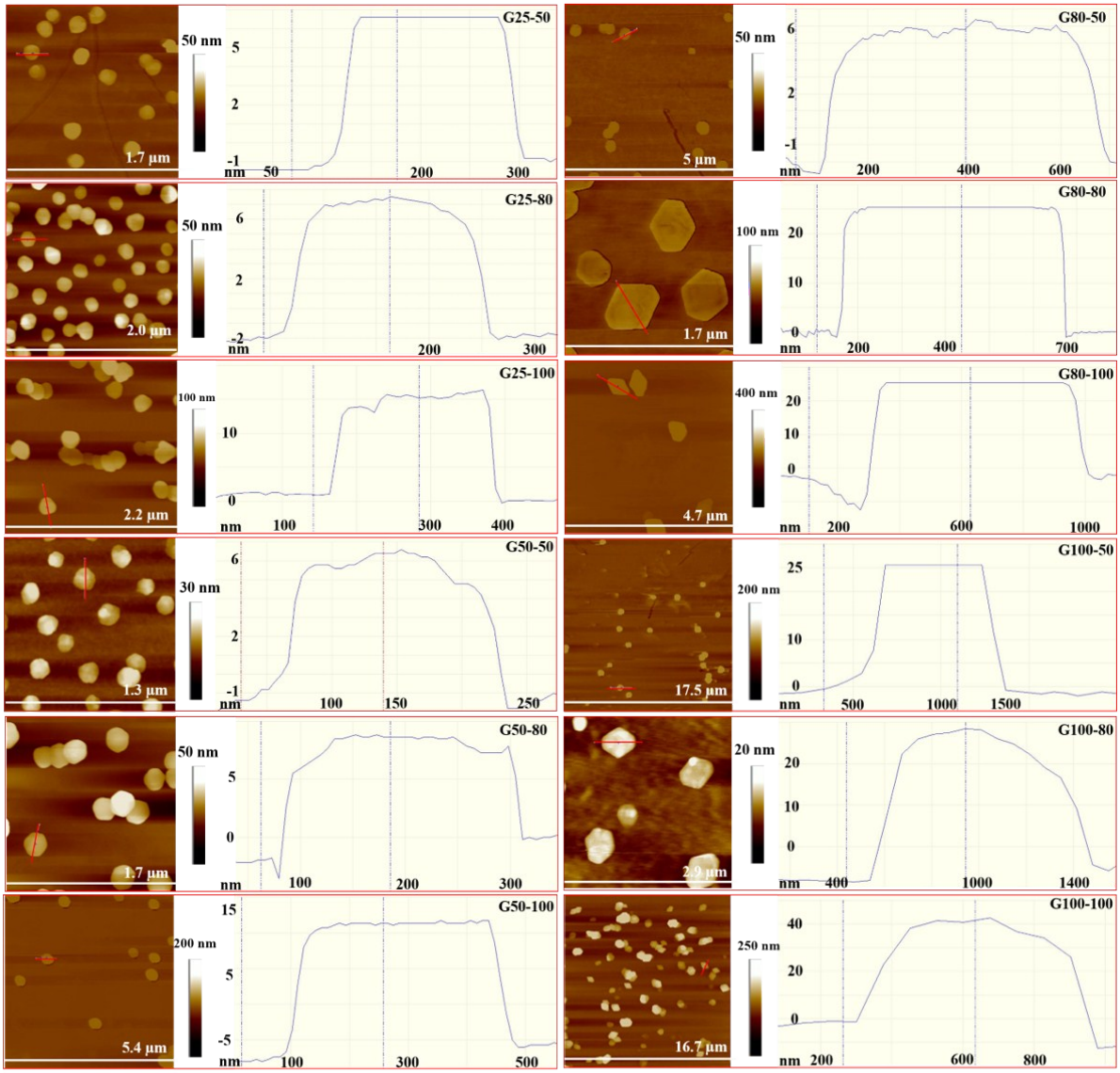

Figure S2. Topographic AFM image and corresponding cross-section for the as-prepared gibbsite nanoplates.

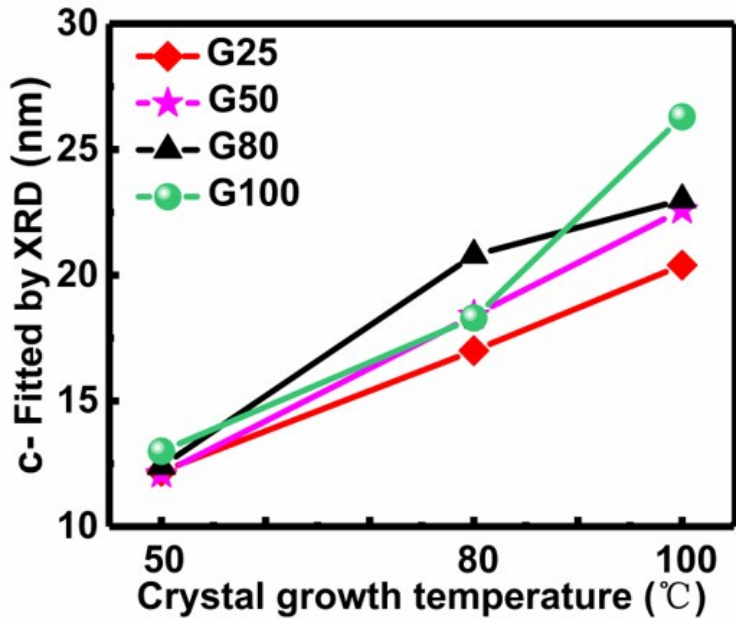

Figure S3. Thickness of as-prepared gibbsite samples determined by XRD fitting.