

# Supporting Information

## Manipulation of Morphology, Particle Size of Barium Sulfate and the Interacting Mechanism of Methyl Glycine Diacetic Acid

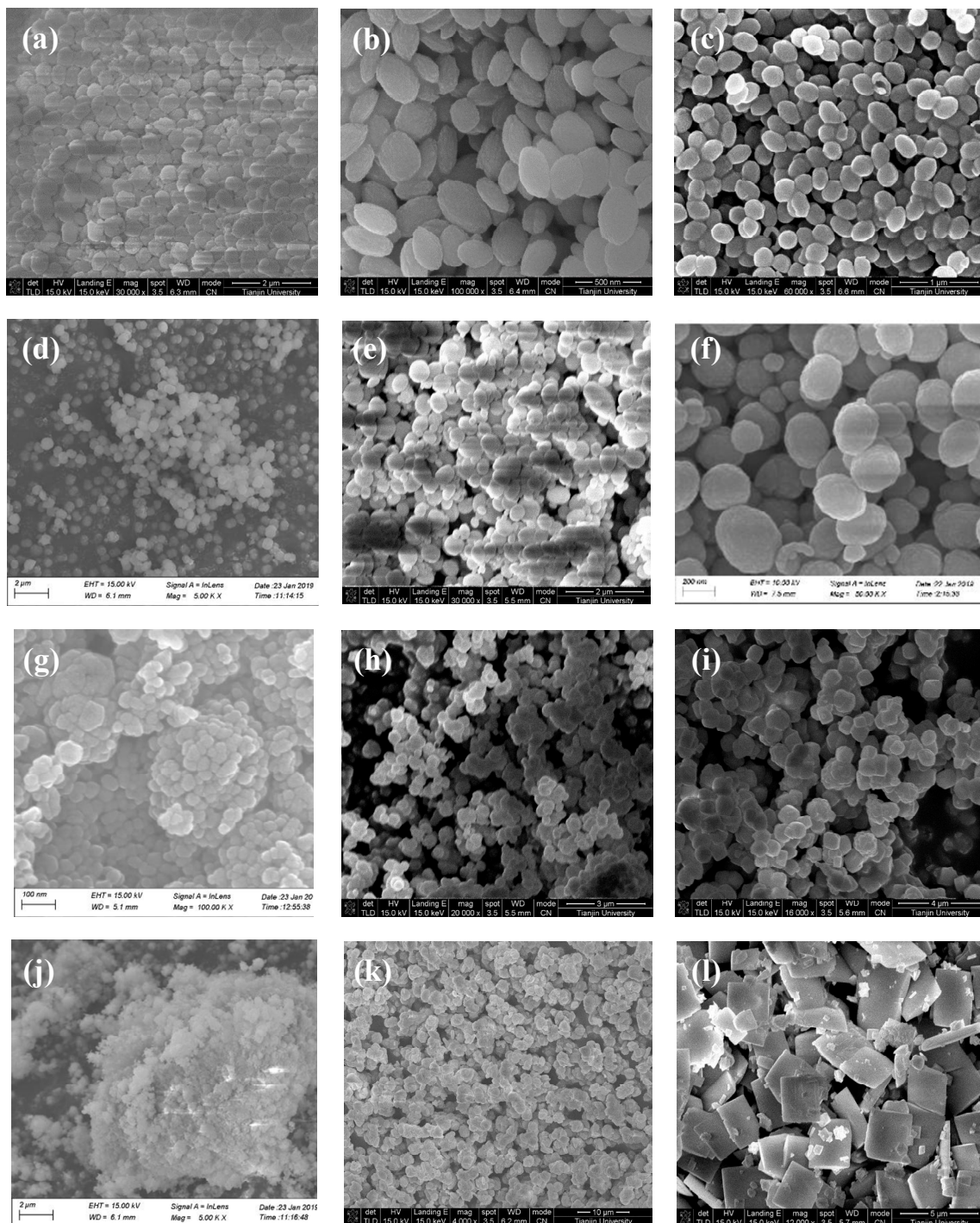
Jing Li <sup>1,2,3</sup>, Yanan Zhou <sup>1,\*</sup>, Jingkang Wang <sup>2</sup>, Na Wang <sup>2,\*</sup>, Jingtao Bi <sup>2</sup>, Xin Li <sup>2</sup>, Kui Chen <sup>2</sup> and Hongxun Hao <sup>2</sup>

<sup>1</sup> College of Chemical Engineering, North China University of Science and Technology, Tangshan 063210, China; lllj@tju.edu.cn

<sup>2</sup> National Engineering Research Center of Industrial Crystallization Technology, School of Chemical Engineering and Technology, Tianjin University, Tianjin 300072, China; jkwang@tju.edu.cn (J.W.); jingtaob@gmail.com (J.B.); xinlll@tju.edu.cn (X.L.); chenkuai@tju.edu.cn (K.C.); hongxunhao@tju.edu.cn (H.H.)

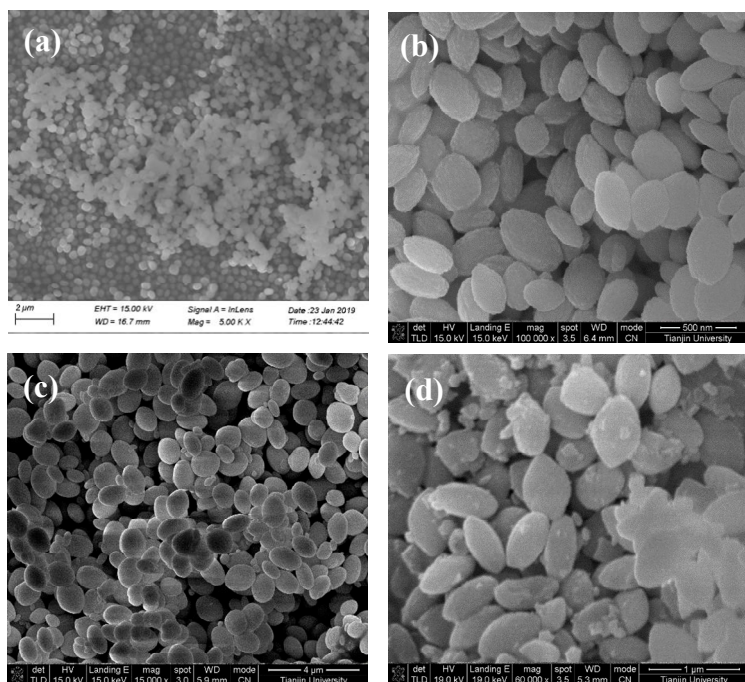
<sup>3</sup> Beijing Institute of Biological Products Co., Ltd., Beijing 100176, China

\* Correspondence: zynzyn@tju.edu.cn (Y.Z.); wangna224@tju.edu.cn (N.W.)



**Figure S1.** SEM of barium sulfate product obtained with different reactant concentrations at different pH values: (a) 0.1 M, natural pH(pH = 12.0); (b) 0.005 M, natural pH(pH =

10.9); (c) 0.001 M, natural pH( pH = 10.0); (d) 0.1 M, pH = 9.0; (e) 0.005 M, pH = 9.0; (f) 0.001M, pH = 9.0; (g) 0.1 M, pH = 7.0; (h) 0.005 M, pH = 7.0; (i) 0.001 M, pH = 7.0; (j) 0.1 M, pH = 3.0; (k) 0.005 M, pH = 3.0; (l) 0.001 M, pH = 3.0.



**Figure S2.** SEM of barium sulfate obtained at different reaction temperatures (reactant concentration 0.005 M): (a) 10 °C; (b) 25 °C; (c) 50 °C; (d) 80 °C.