Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supplementary Information

Vapor-assisted crystallization of *in situ* glycine-modified UiO-66 with enhanced CO_2 adsorption

Yugo Fujimoto, [a] Yasuhiro Shu, [a] Yurika Taniguchi, [a] Koji Miyake, [a]* Yoshiaki Uchida, [a] Shunsuke Tanaka [b] and Norikazu Nishiyama [a]

a) Division of Chemical Engineering, Graduate School of Engineering Science, Osaka University, 1-3 Machikaneyama, Toyonaka, Osaka 560-8531, Japan.

b) Department of Chemical, Energy and Environmental Engineering, Faculty of Environmental and Urban Engineering, Kansai University, 3-3-35 Yamate-cho, Suita-shi, Osaka, 564-8680, Japan.

E-mail: kojimiyake@cheng.es.osaka-u.ac.jp

1. XRD patterns of prepared UiO-66 compared to simulated UiO-66

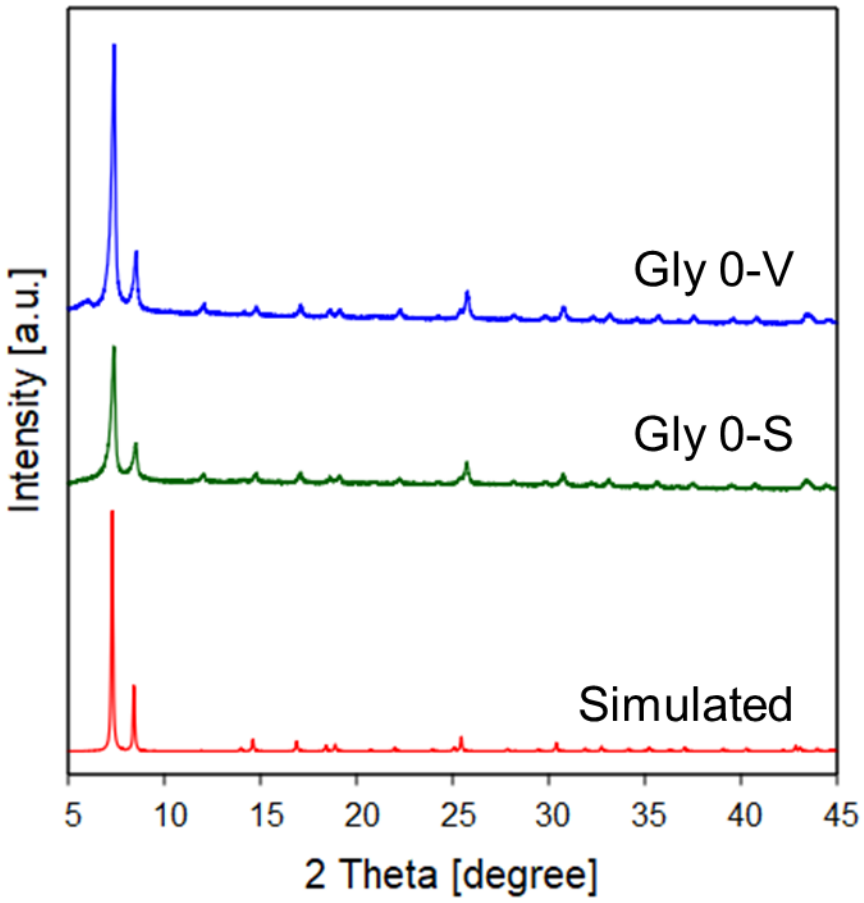

Fig. S1 XRD patterns of Gly 0-V, Gly 0-S and simulated UiO-66.

2. Effect of acid sources

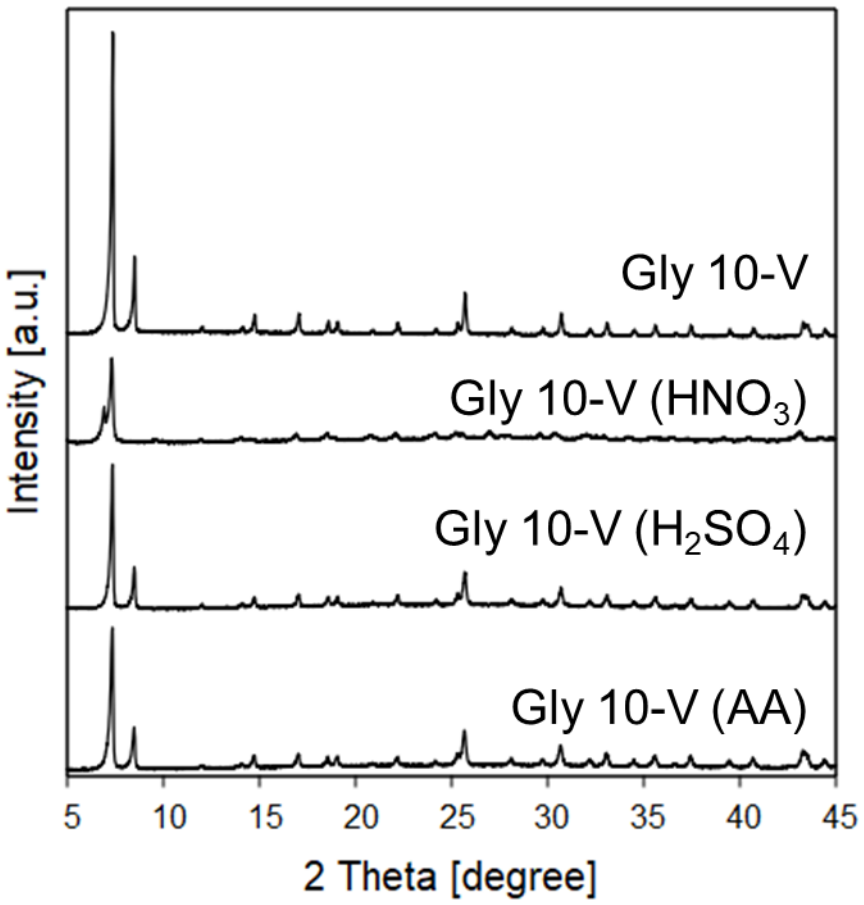

Fig. S2 XRD patterns of Gly 10-V and Gly 10-V (other type of acid).

3. TEM images

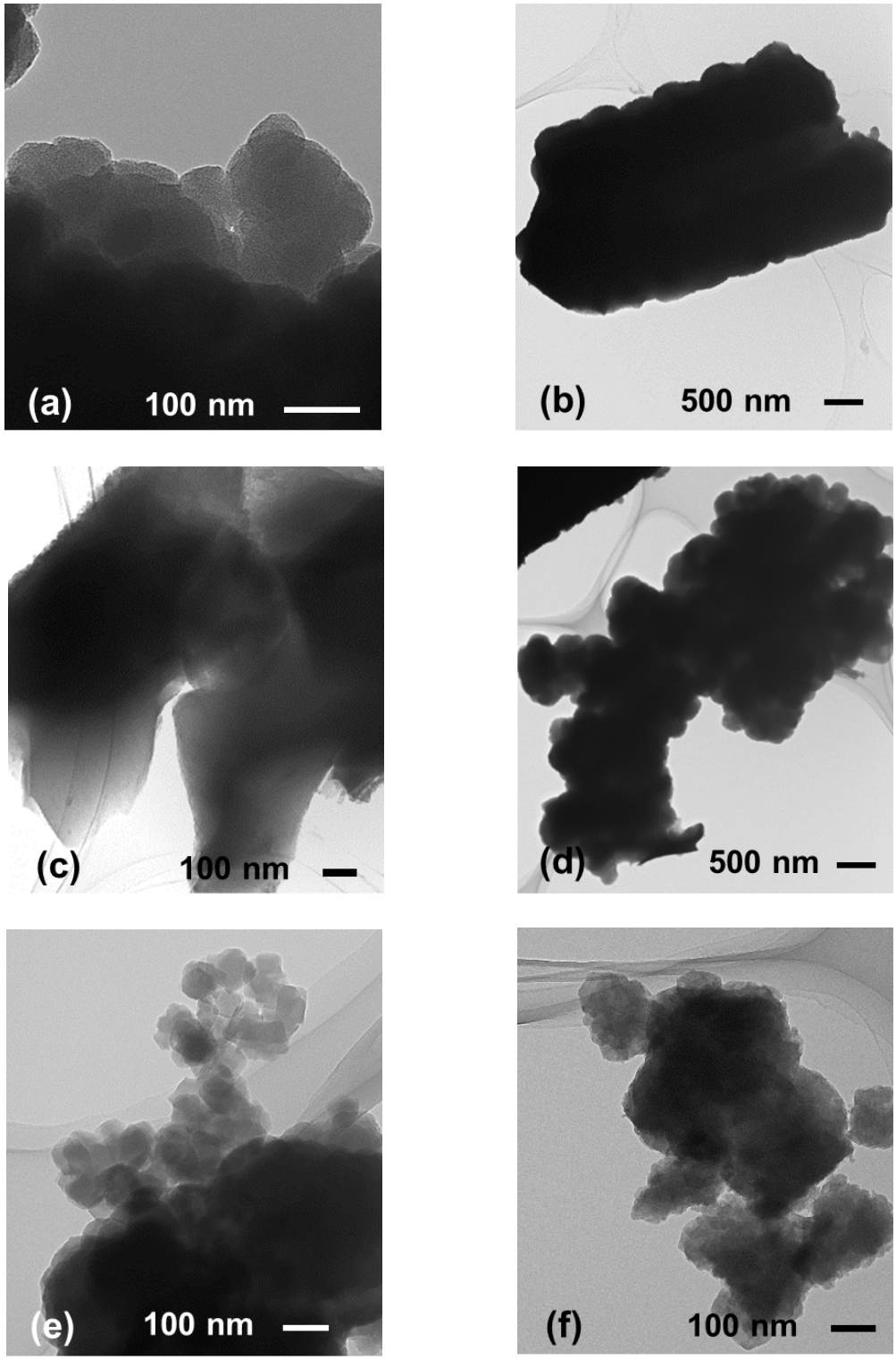

Fig. S3 TEM images of Gly 0-V (a), Gly 5-V (b), Gly 10-V (c), Gly 20-V (d), Gly 0-S (e) and Gly 10-S (f).

4. Textual property corresponding to Fig. 2 (a)

Table S1 Textual properties of Gly 0-V, Gly 10-V, Gly 0-S and Gly 10-S determined by the N_2 adsorption analysis.

Sample	S_{BET} [m^2/g]	V_{total} [cm^3/g]	V_{micro} [cm^3/g]
Gly 0-V	1006.9	0.56	0.39
Gly 10-V	1065.7	0.64	0.40
Gly 0-S	495.2	0.40	0.19
Gly 10-S	483.3	0.27	0.18