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Hydrolysis of crystalline cellulose to glucose in an autoclave containing both gaseous and liquid water

Takashi Harada*, Yuji Tokai, Akira Kimura, Shigeru Ikeda, Michio Matsumura

Research Center for Solar Energy Chemistry, Osaka University, 1-3 Machikaneyama,

Toyonaka 560-8531, Japan

* Corresponding Author: Takashi HARADA

Tel: +81-6-6850-6697; fax: +81-6-6850-6699

E-mail address: harada@chem.es.osaka-u.ac.jp

Supporting Information

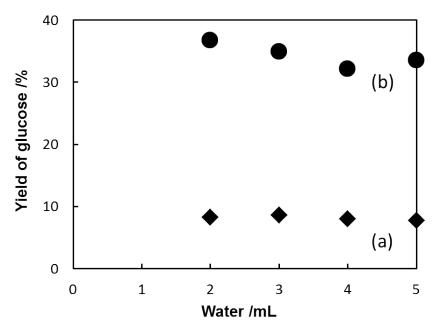


Fig. S1 Yield of glucose produced by hydrolysis of amorphous cellulose as a function of water added to the autoclave (100 mL). The hydrolysis was carried out at (a) 160 °C and (b) 190 °C for 5 h. Cellulose: 324 mg, water: 2 mL.

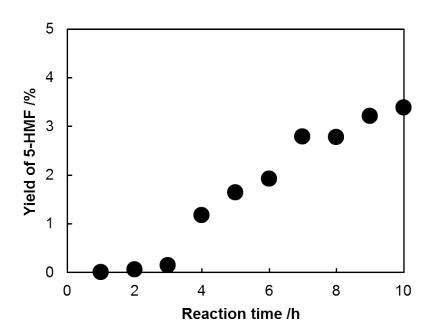


Fig. S2 Yield of 5-HMF produced by hydrolysis of crystalline cellulose at 190 °C. Cellulose: 324 mg, water: 2 mL.

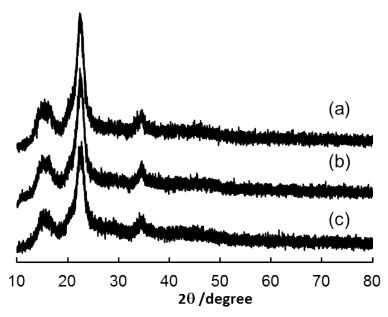


Fig. S3 XRD patterns of (a) reagent crystalline cellulose and residual cellulose after hydrolysis reaction at 190 °C for (b) 4 h and (c) 8 h.