



Title	Mechanochemical Synthesis of a Carboxylated Carbon Catalyst and Its Application in Cellulose Hydrolysis
Author(s)	Shrotri, Abhijit; Kobayashi, Hirokazu; Fukuoka, Atsushi
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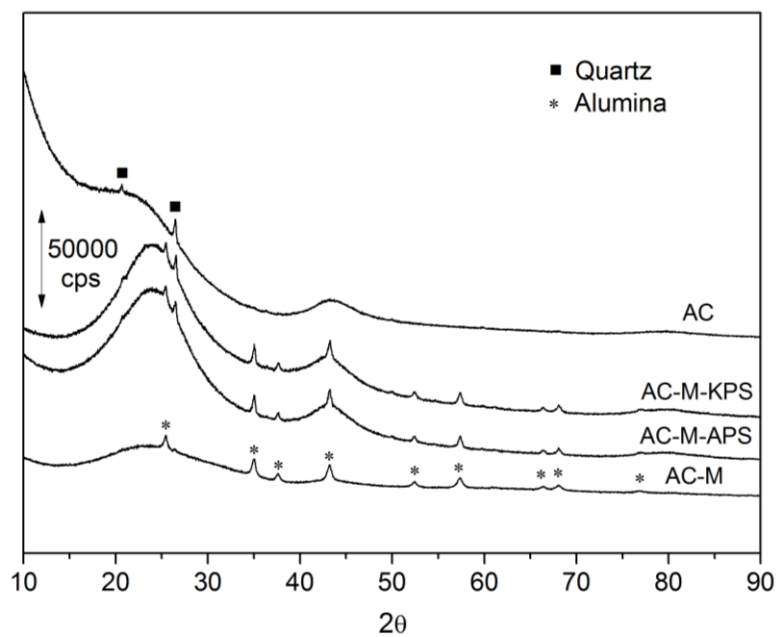


Figure S1: X-Ray diffraction of different carbon catalysts.

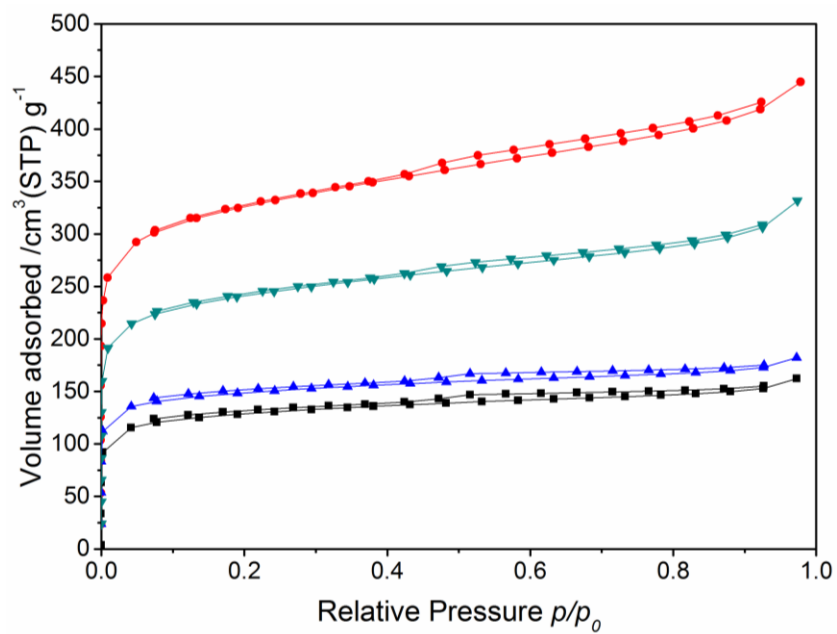


Figure S2: N_2 adsorption isotherms for the carbon catalysts. [●] AC, [▼] AC-M, [▲] AC-M-APS, [■] AC-M-KPS.

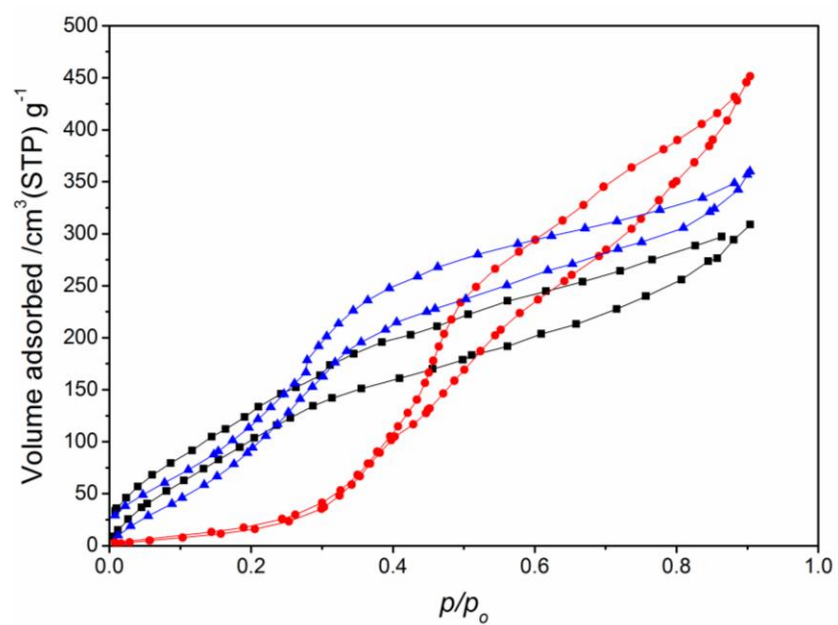


Figure S3: Water adsorption isotherms for the carbon catalysts. [●] AC, [▲] AC-M-APS, [■] AC-M-KPS.

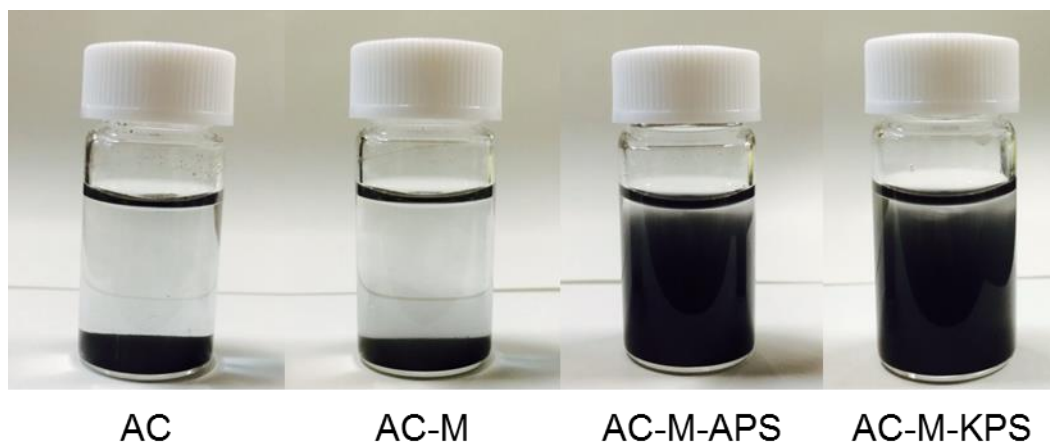


Figure S4: Images of catalyst dispersed in water and left undisturbed for 1 h.

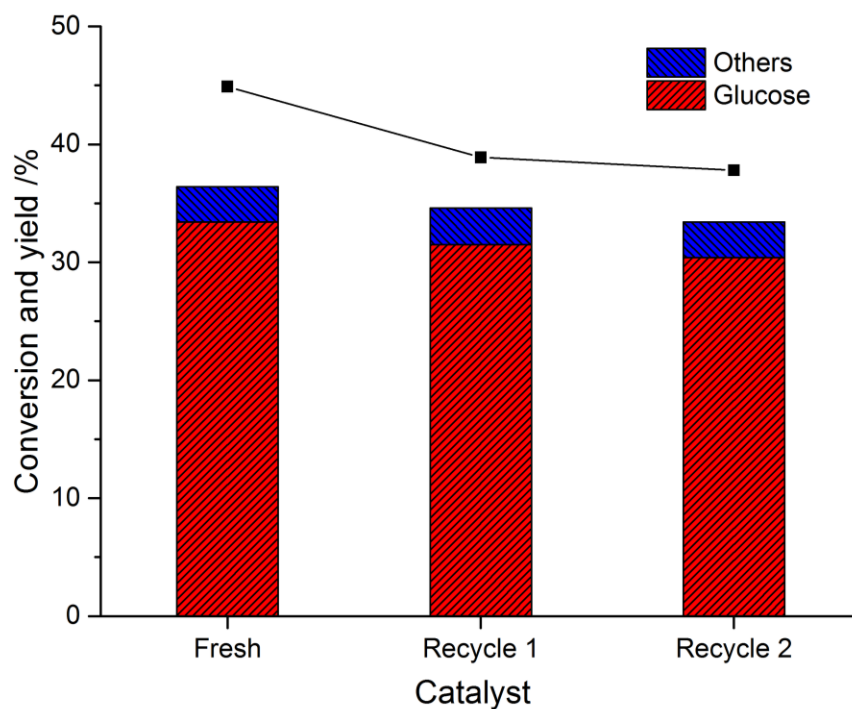


Figure S5: Conversion of cellobiose [■] and yield of products (bars) using AC-M-KPS as catalyst for three successive reactions. Others products include sugar isomers and dehydration products such as levoglucosan and 5-HMF.

Reaction conditions for recycle experiment: 324 mg of cellobiose and 50 mg of catalysts was added to high-pressure reactor along with 40 ml of water. After reaction at 180 °C for 20 min, the products were separated from the catalyst and analyzed by HPLC. The catalyst was washed with water and dried for 16 h at 110 °C before using again for the recycle reaction.