

Supporting Information

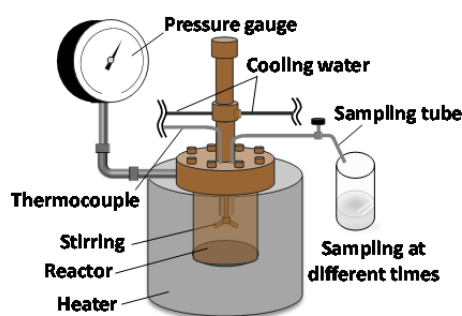


Figure SI-1. Developed experimental apparatus for hydrothermal reaction system

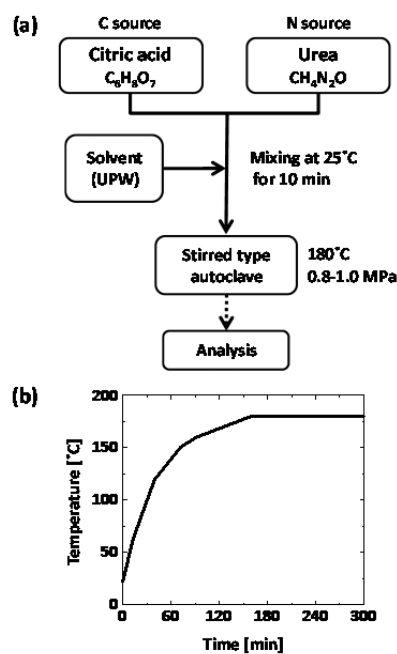


Figure SI-2 (a) Experimental method and (b) Solution temperature in the stirred type autoclave reactor as a function of reaction time.

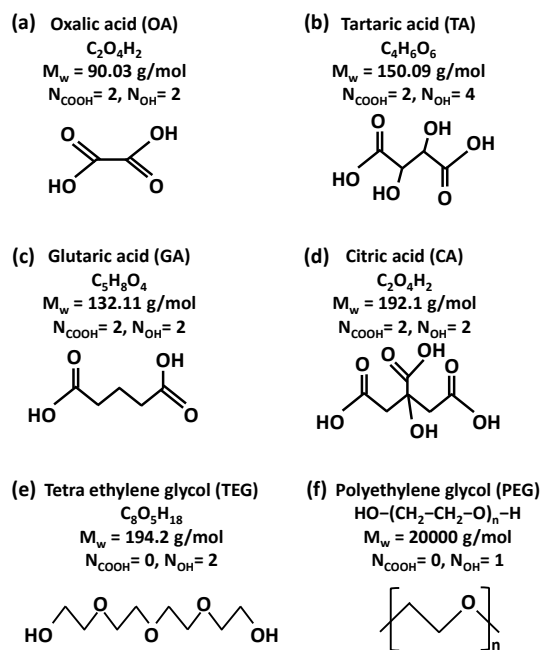


Figure SI-3 Various carbon sources used in the experiment; (a) Oxalic acid (OA), (b) Tartaric acid (TA), (c) Glutaric acid (GA), (d) Citric acid (CA), (e) Tetra ethylene Glycol (TEG), (f) Polyethylene Glycol (PEG); M_w , N_{COOH} , and N_{OH} indicate molecular weight, number of COOH function, and number of OH function, respectively.