Uracil-Mediated Supramolecular Assembly for C-Enriched Porous Carbon Nitride with Enhanced Photocatalytic Hydrogen Evolution

Jiaqi Wen,‡^a Yuewei Wang,‡^b Hao Zhao,^a Meng Zhang,^a Shuaiyang Zhang,^a Yonggang Liu,^c and Yunpu Zhai*^a

^a Green Catalysis Center, The College of Chemistry, Zhengzhou University, No. 100 Science Avenue, Zhengzhou, Henan 450001, PR China

^b Henan Institute of Advanced Technology, Zhengzhou University, Zhengzhou 450003, China

^c College of Ecology and Environment, Zhengzhou University, Zhengzhou, Henan 450001, P. R. China

‡ These authors contributed equally to this work

*Corresponding author: yunpu.zhai@zzu.edu.cn (Y.P. Zhai)

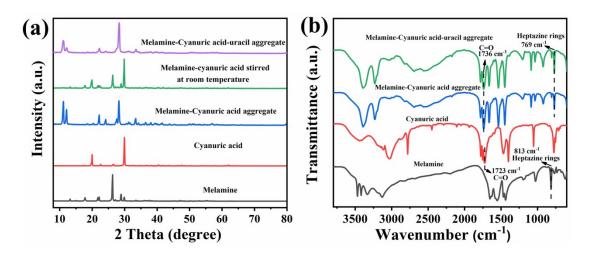


Figure S1. (a) XRD patterns and (b) FT-IR spectra of melamine, cyanuric acid, melamine–cyanuric acid aggregate (MCA precursor), melamine-cyanuric acid mixture obtained at room temperature, and melamine–cyanuric acid–uracil aggregate (MCA-U2 precursor).

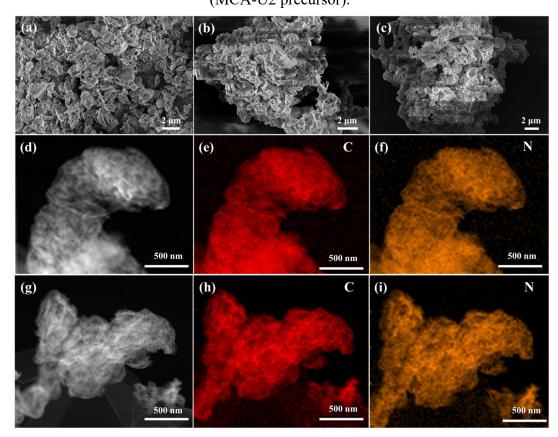


Figure S2. SEM images of the (a) MCA-U1, (b) MCA-U2, and (c) MCA-U3. EDS elemental mappings of MCA-U1 (d–f) and MCA-U3 (g–i).

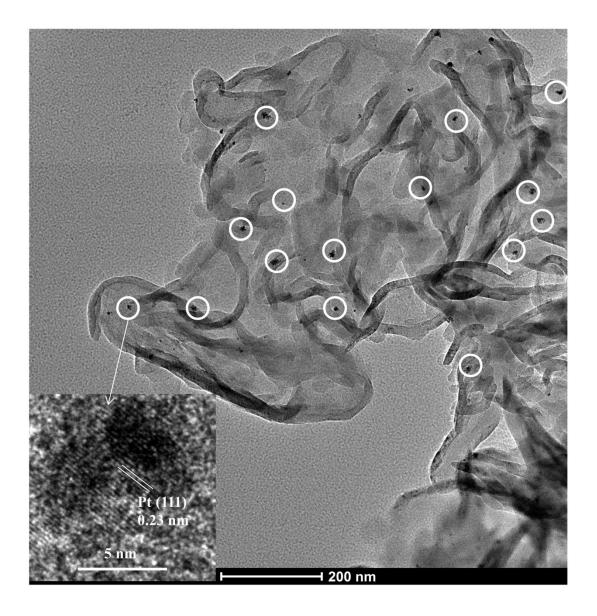


Figure S3. TEM images of Pt/MCA-U2 (inset: Pt nanoparticles with a lattice spacing of 0.23 nm).