Supporting information

Facilely Fabricating Multifunctional N-enriched Carbon

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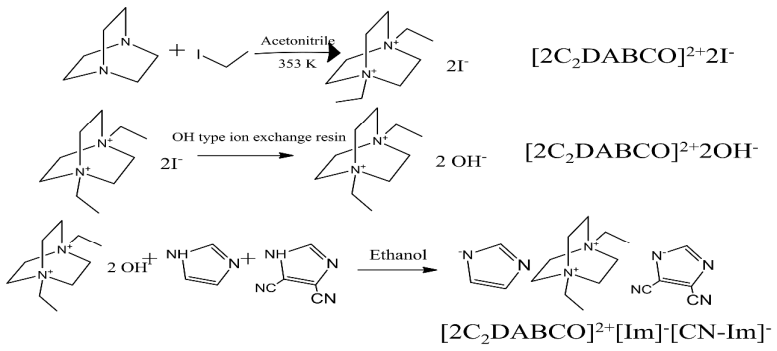
Table S1. Zn content of the PCn samples detected by ICP.

Samples	PC600	PC700	PC800	PC900	PC1000	PC900 (washed 4 h)
Zn content (ppm)	0	0	0	0	0	0.0562

Table S2. Reduction of TSNA in the tobacco extracting solution by porous carbon materials

Sample	NNN (%)	NAT (%)	NNK (%)	TSNA (%)
PC600	12.4	28.2	76.6	36.4
PC700	15.6	24.6	51.7	29.1
PC800	41.0	56.2	73.8	56.4
PC900	38.6	55.4	85.5	58.5
PC1000	18.8	26.4	43.6	28.7
PC900b	40.0	46.7	84.3	54.6
PC900c	21.8	28.3	48.9	31.9
PC900d	26.4	34.4	70.4	41.5
PC900-1	41.4	56.7	79.9	58.4
PC900-3	52.8	79.9	86.2	73.7
PC900-5	45.0	63.5	80.9	62.7



Scheme S1. Synthetic procedure of dual-Ionic Liquids.

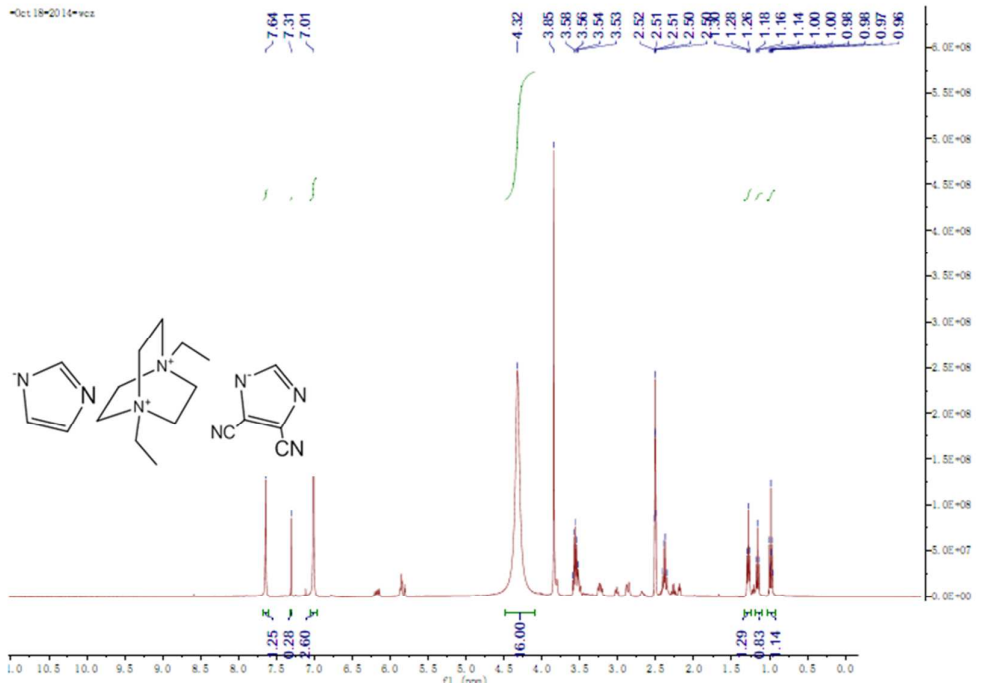


Figure S1. ^{1}H-NMR spectrum of dual-ionic liquids $[2C_2DABCO]^{2+}[Im]^{-}[CN\text{-}Im]^{-}$.

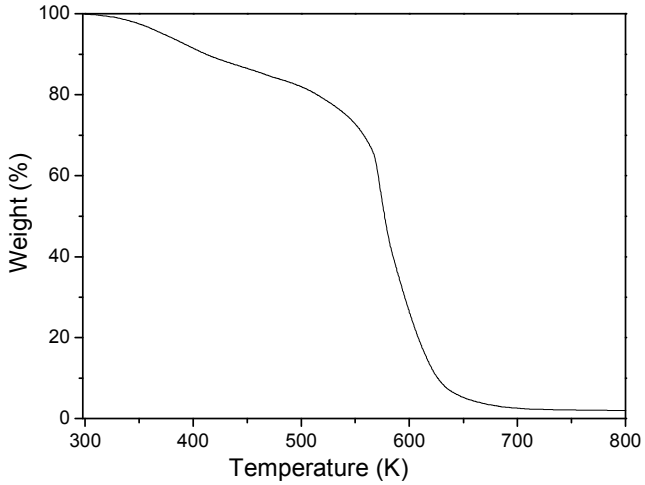


Figure S2.TG results of the ionic liquids ($[2C_2DABCO]^{2+}$ $[Im]^{-}$ $[CN\text{-}Im]^{-}$.).

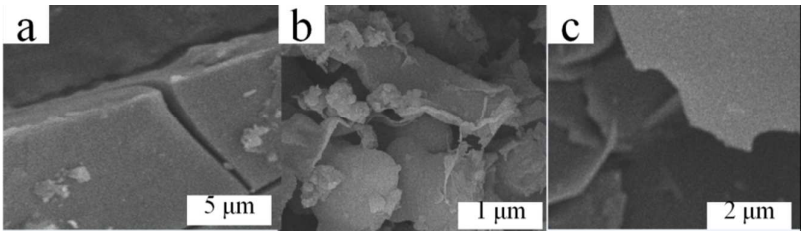


Figure S3. SEM images of (a) PC900d, (b) PC900b and (C) PC900c.

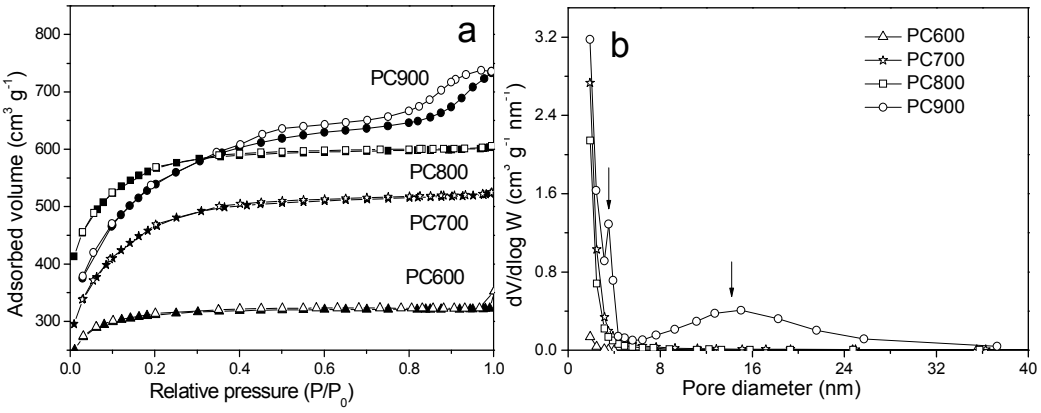


Figure S4. The nitrogen adsorption-desorption isotherms (a) and pore size distributions (b) of PCn series samples. The isotherms of PC800 were offset vertically by 100 cm^3 g^{-1}

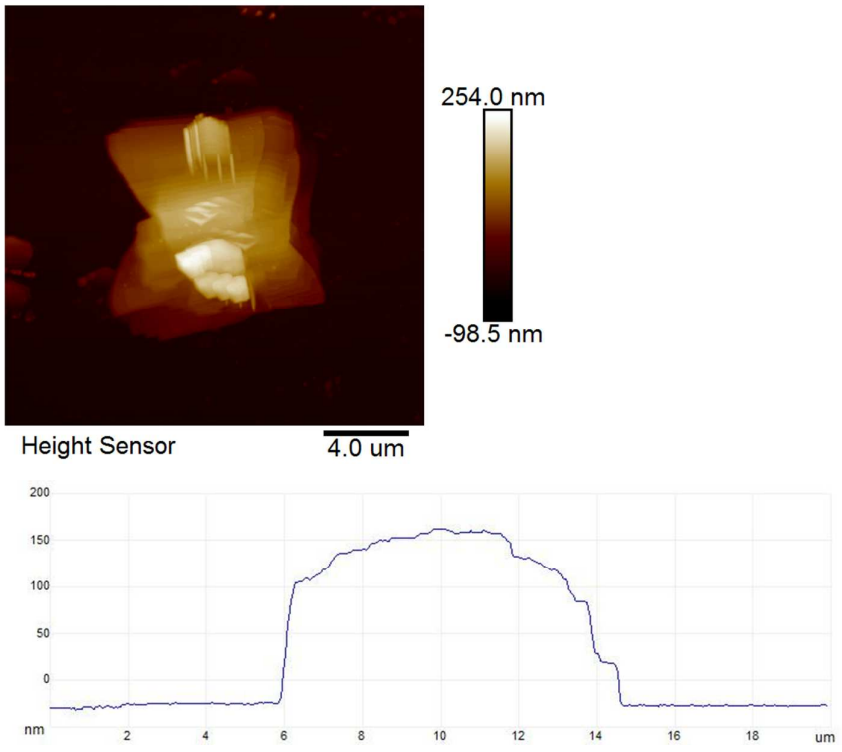


Figure S5. TM-AFM images of PC800 sample.

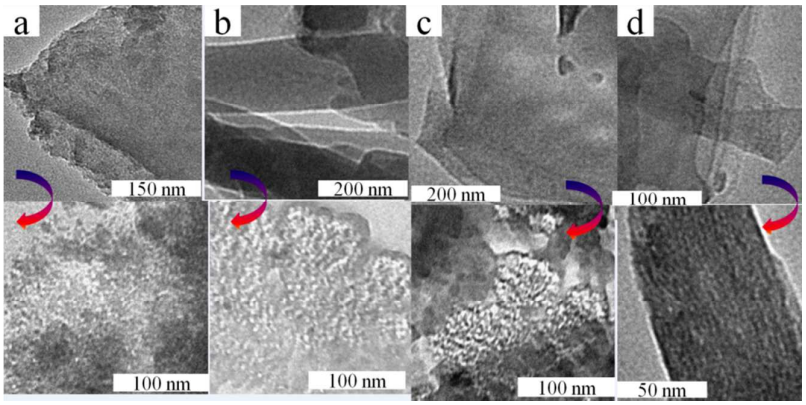


Figure S6. TEM images of (a) PC600, (b) PC700, (c) PC800, and (d) PC900.

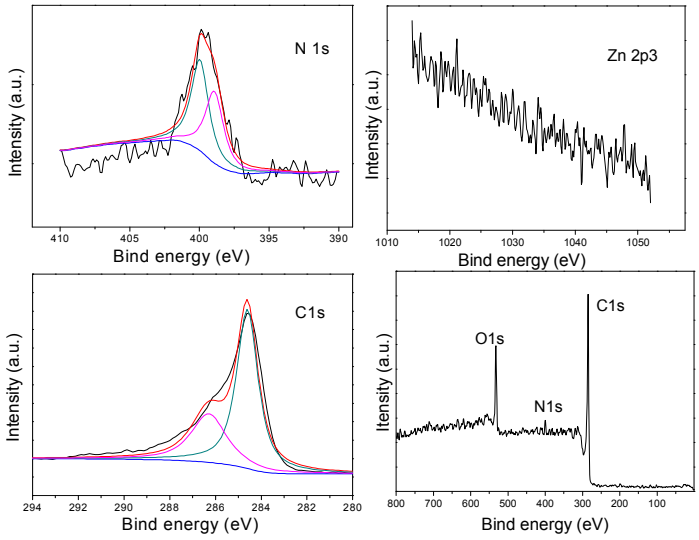


Figure S7. XPS profiles of the PC900 sample.

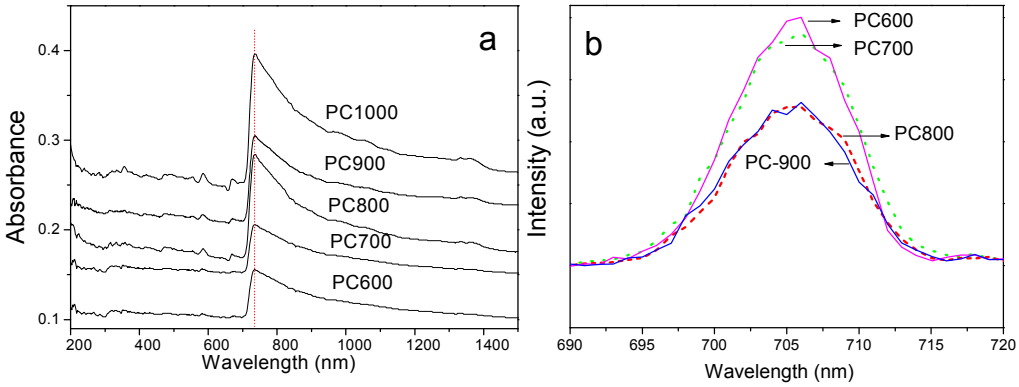


Figure S8. UV/Vis absorption spectra (a) and fluorescence spectra of PCn samples under an excitation wavelength of 250 nm (b).

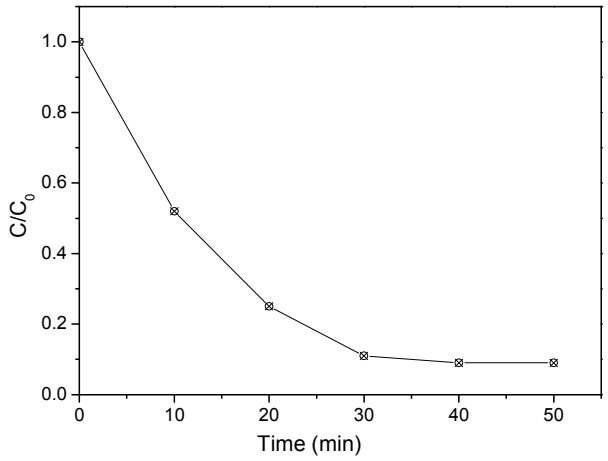


Figure S9. Removal of MO in the presence of PC800 under visible light.

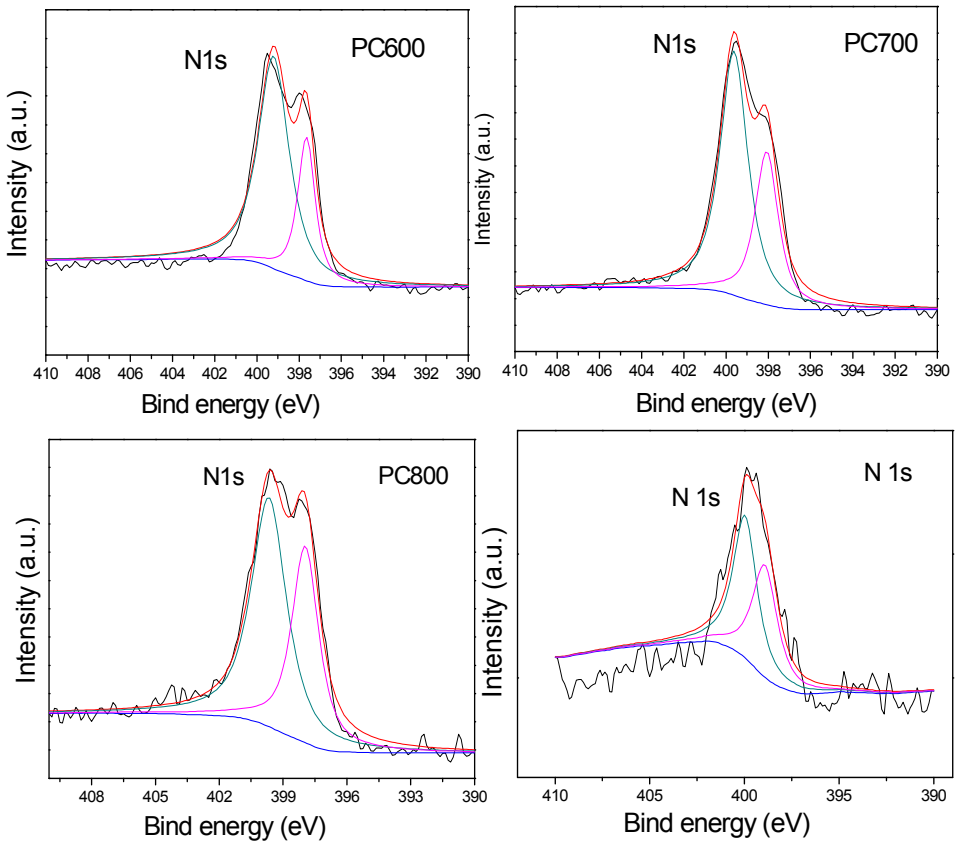


Figure S10. XPS profiles of the PCn sample.

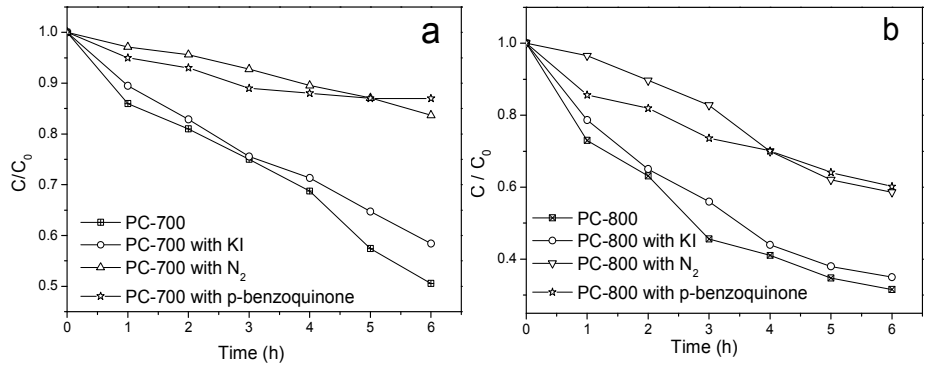


Figure S11. The effects of KI and N_2 on the degradation of MOin the presence of PC700 (a) and PC800 (b) under visible light irradiation($\lambda > 420$ nm).

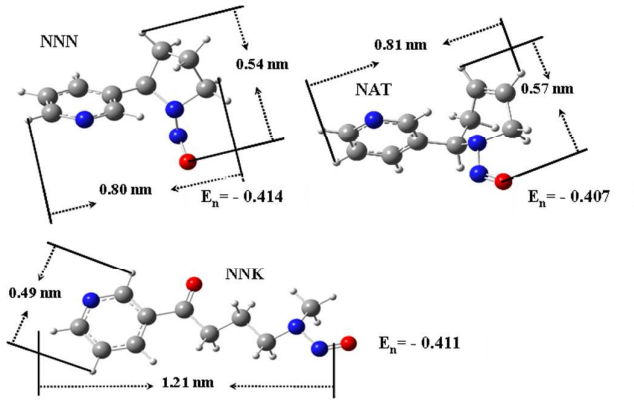


Figure S12. Simulation optimized structure of TSNA (NNN, NAT and NNK) molecules.