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Supplementary Information

One-step, template-free synthesis of highly porous nitrogen-doped carbons from a single protic salt and their application to CO_2 capture

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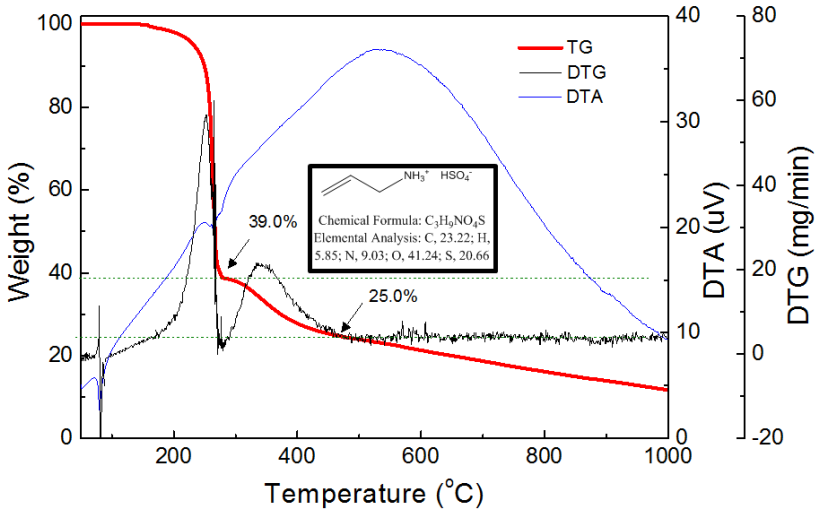


Figure S1. TGA of [Allyl-NH_3][HSO_4] under an Argon flow.

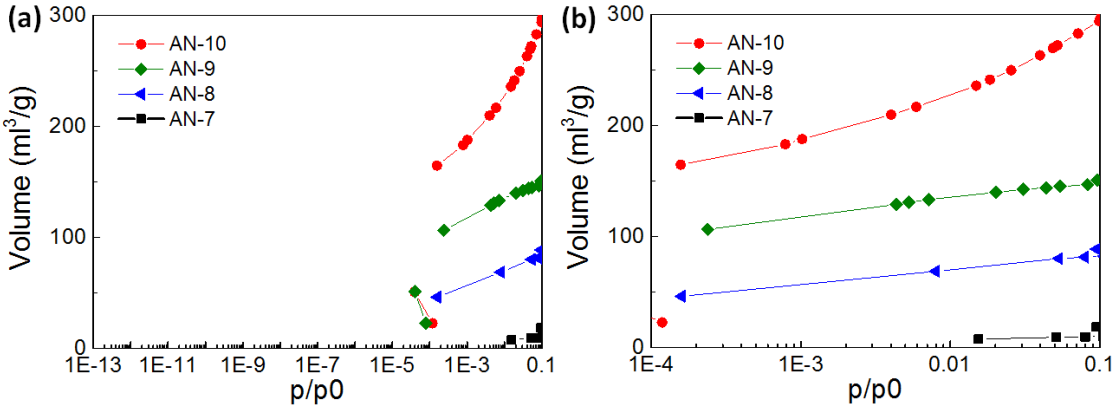
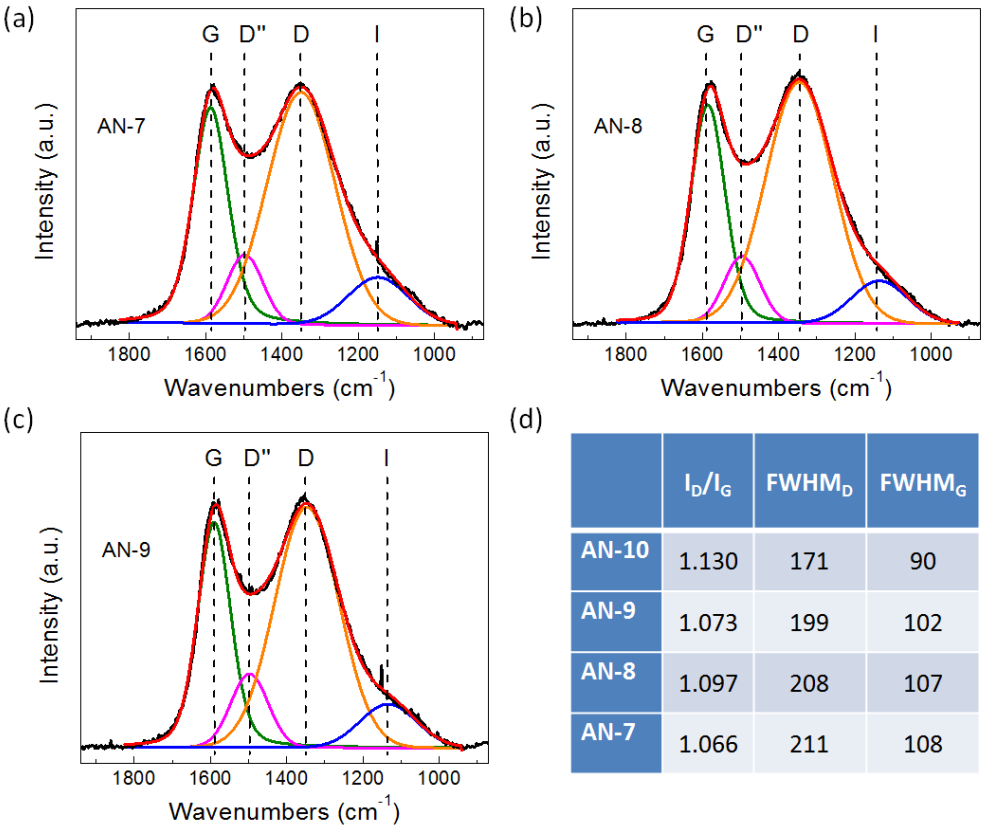


Figure S2. N_2 sorption isotherms of carbons derived from [Allyl-NH_3][HSO_4] of low pressure regions (p/p_0: 0-0.1).



(d)

	I_D/I_G	$FWHM_D$	$FWHM_G$
AN-10	1.130	171	90
AN-9	1.073	199	102
AN-8	1.097	208	107
AN-7	1.066	211	108

Figure S3. (a-c) Deconvolution of the Raman spectra of AN-7, AN-8, and AN-9. (d) I_D/I_G ratio and FWHM (full width at half maximum) of G or D band for all carbons.

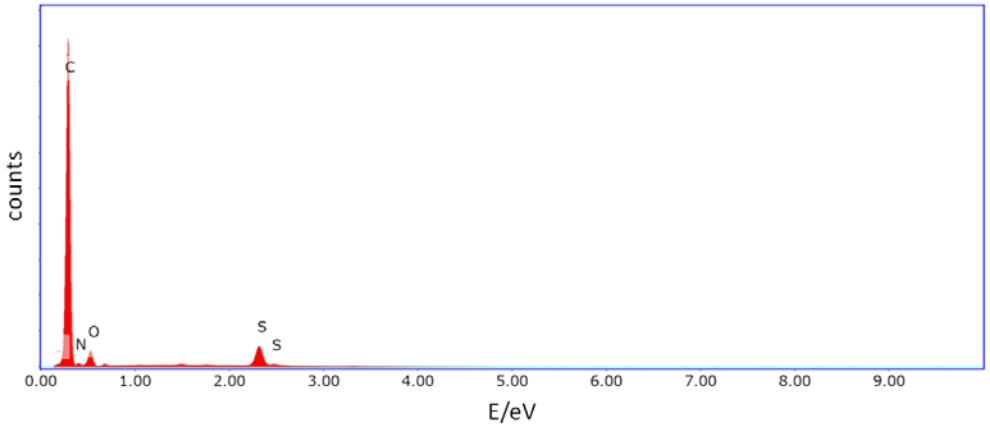


Figure S4. EDS spectrum of AN-9.

Table S1. Elemental composition of [Allyl-NH_3][HSO_4]-derived carbons determined by combustion elemental analysis (wt%, CHNS).

Carbon	C	N	S	H	O[a]
AN-10	60.31	1.925	2.871	3.296	31.598
AN-9	69.23	4.606	4.584	2.009	19.571
AN-8	69.98	6.520	4.845	1.835	16.820
AN-7	70.08	7.878	4.688	2.073	15.281

[a] The oxygen (O) content was obtained by difference after deducting the C, N, S, H content.