Supplemental information

Development of coconut shell activated carbon tethered Urease for degradation of urea in packed bed

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Figure S1. The digital image of the raw coconut shell AC granules.

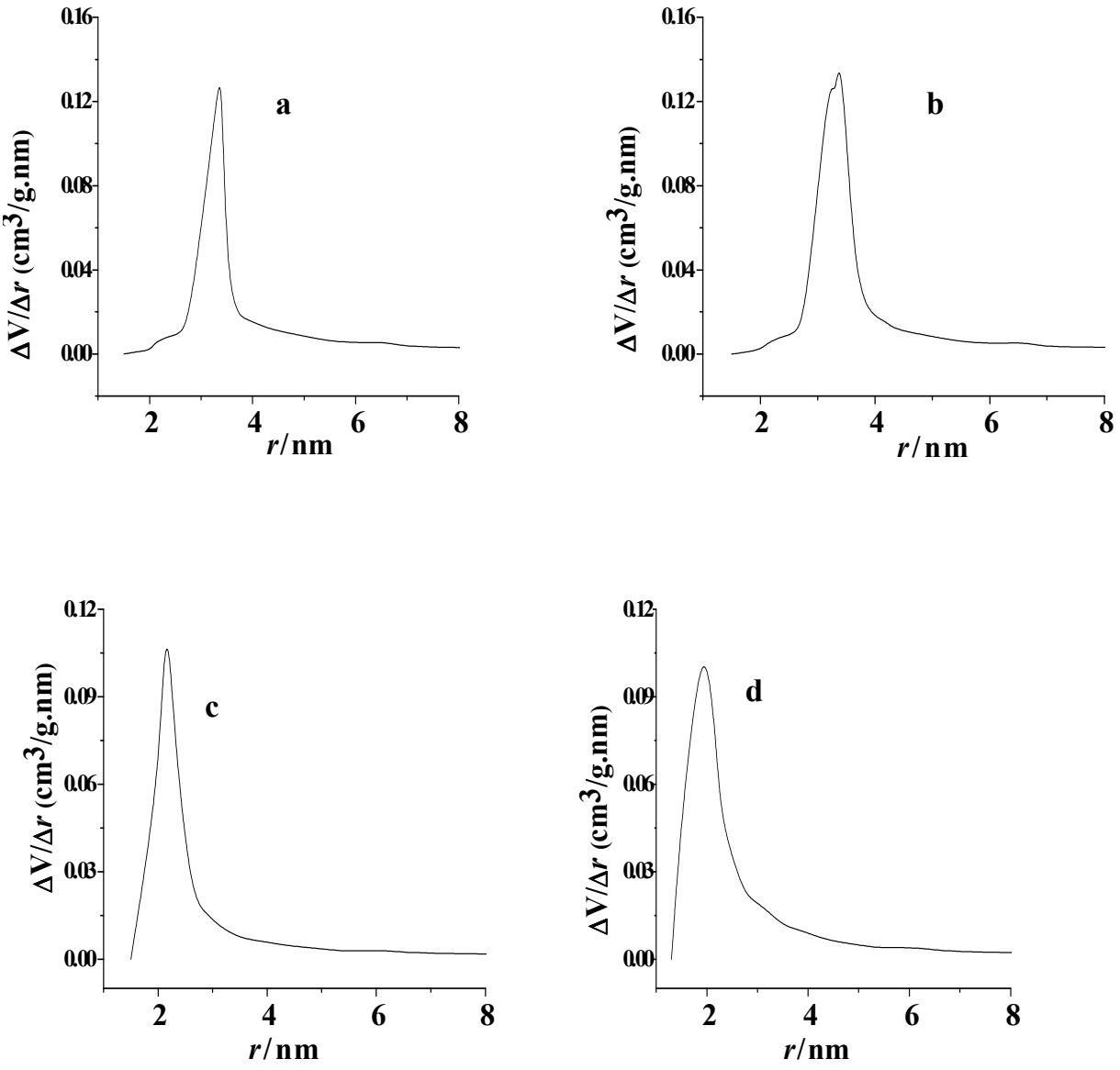

Figure S2. Pore distributions of (a) the raw AC, (b) oxidized AC, (c) aminosilylated AC and (d) enzyme tethered AC.

Table S1

Integral area percentage of C(1s) for the ACs treated with different HNO_3.

HNO_3 concentration	Area percentage at different C(1s) B.E. (eV),			
	284.9	285.7	286.8	288.3
0	80.70	9.46	6.54	3.30
5%	77.92	12.30	5.21	4.57
20%	68.82	13.39	12.12	5.66
60%	71.64	7.88	9.50	10.98

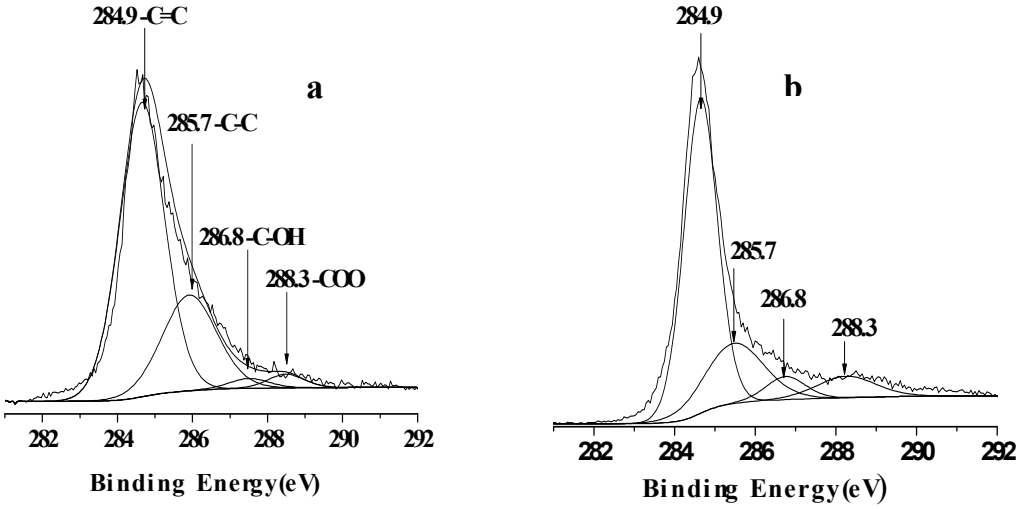

Figure S3. XPS spectra of (a) 5 % HNO_3 treated AC and (b) 60 % HNO_3 treated AC .

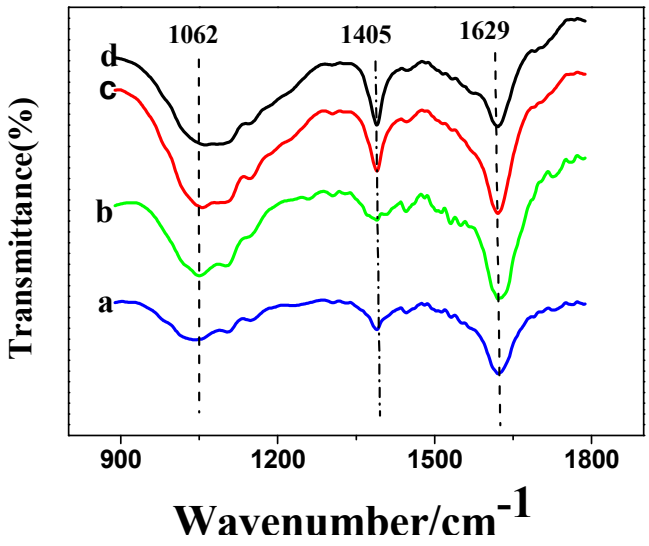

Figure S4. FT-IR spectra of the ACs treated with different concentration of HNO_3: (a) 0% HNO_3 (b) 5 % HNO_3 (c) 40 % HNO_3 (d) 60 % HNO_3.