## **Supporting Information**

Biomass-derived nitrogen functionalized carbon nanodots and their anti-biofouling properties

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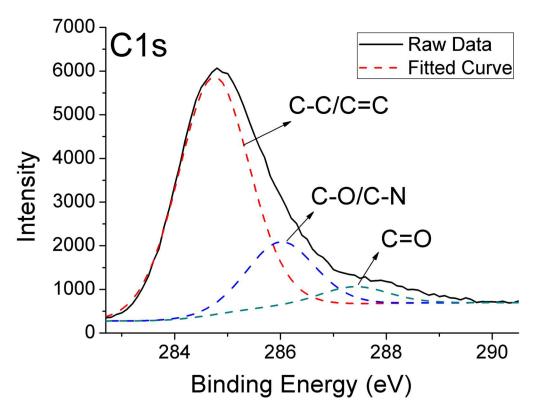


Fig. S1 The C1s XPS of CSU180

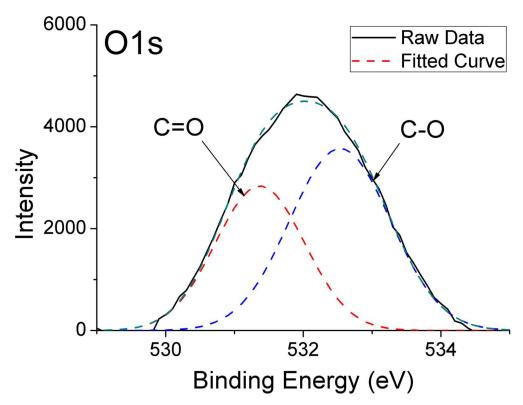


Fig. S2 The O1s XPS of CSU180  $\,$ 

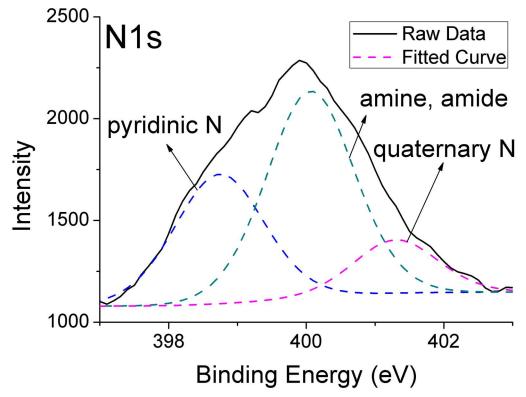


Fig. S3 The N1s XPS of CSU180

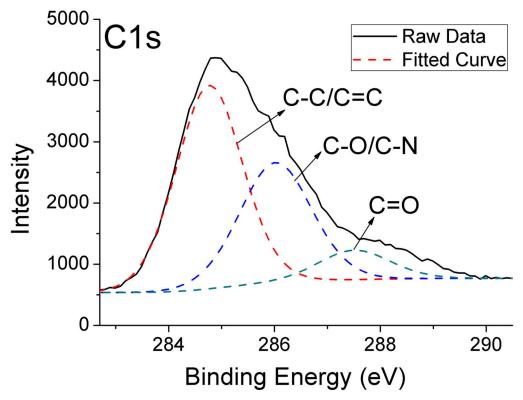


Fig. S4 The C1s XPS of CS180

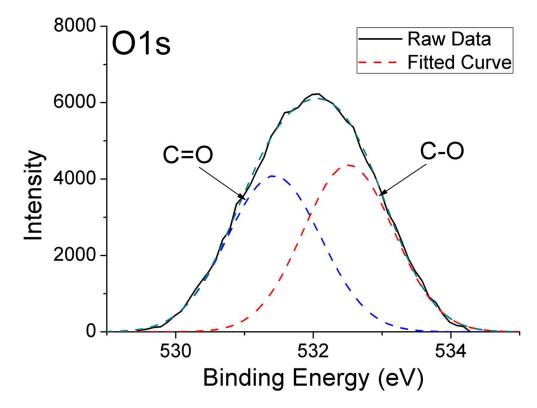


Fig. S5 The O1s XPS of CS180

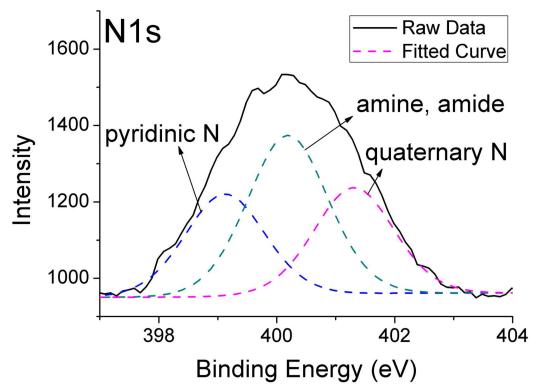


Fig. S6 The N1s XPS of CS180

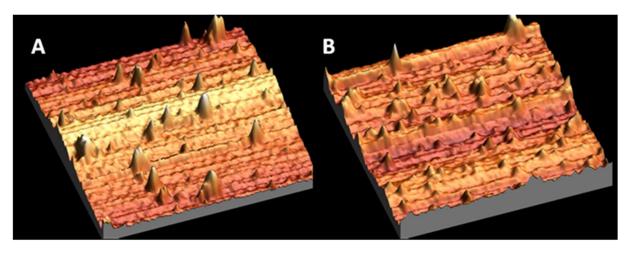


Fig. S7 AFM studies of CS180 (A) and CSU180 (B).

For the modified samples the roughness was determined with AFM studies (Fig. SI7). The roughness (Rq) was found to be 0.212 nm for CS180 and 0.246 nm for CSU180.

Table S1

Intensity of the N 1s bands (surface area of the bands)

| Sample | Pyridinic       | Amine/amide     | Quaternary     |
|--------|-----------------|-----------------|----------------|
| CS180  | 1219.9 (465.2)  | 1375.6 (725.8)  | 1238.4 (478.8) |
| CSU180 | 1725.2 (1061.7) | 2134.8 (1651.7) | 1406.9 (409.2) |