

Supporting Information

Biomass-derived Nitrogen-doped Carbon Aerogel Counter Electrodes for Dye Sensitized Solar Cells

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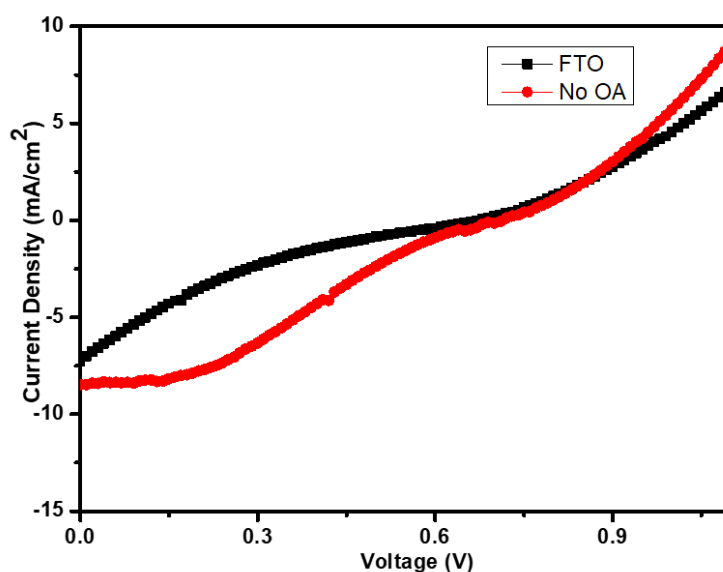


Figure S1 J-V curves of the devices fabricated by using FTO and carbon suspension without OA as counter electrodes.

Table S1 Photovoltaic parameters of FTO and N-dC aerogel without OA as a counter electrode in dye sensitized solar cells under 1 sun illumination with 0.25 cm² device area.

Cell Type	Current Density (mA/cm ²)	Open Circuit Voltage (V)	Fill Factor	Efficiency (%)
FTO	7.84	0.68	0.15	0.78
N-dC w/o OA	8.47	0.69	0.28	1.70

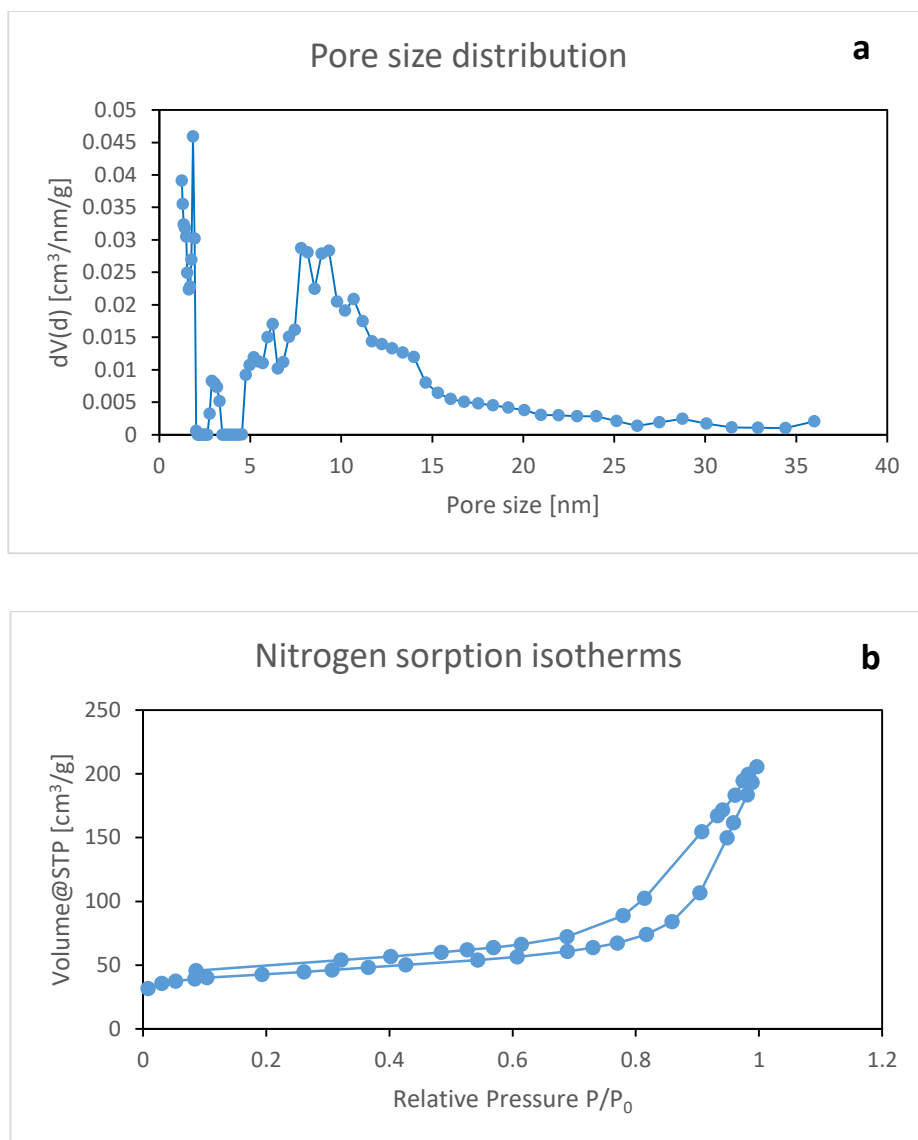


Figure S2 a) The pore size distribution b) surface area of the nitrogen-doped carbon aerogel determined with Density Functional Theory (NLDFT) and Brunauer-Emmett-Teller (BET) theory, respectively, using Nitrogen absorption and desorption isotherms obtained at 77 K with a Quantachrome Nova 4200e.

Surface area 158 m²/g

Total pore volume 0.275 cm³/g

Mesoporous volume 0.231 cm³/g

Microporous volume 0.044 cm³/g