Supplementary Information



Figure S1 The relationship about Conductivity vs. (a) low concentration and (b) high concentration.



Figure S2 The SEM images of C₂N samples



Figure S3 The dispersion performance of $C_2N@rGO$ and C_2N (a) the initial state and (b) 1h later (4wt.% in deionized water).



Figure S4 FT-IR curves of C₂N@rGO-4%, C₂N and GO.



Figure S5 Fitted Raman line scans of (a) GO, b) C_2N , (c) $C_2N@rGO-2\%$, (c) $C_2N@rGO-4\%$, (c) $C_2N@rGO-8\%$, and (c) $C_2N@rGO-12\%$.



Figure S6 Contact Angle measurement of (a-d) $C_2N@rGO-2/4/8/12\%$, (e) C_2N , (f) GO, and (g) $C_2N@rGO-4\%$.



Figure S7 N_2 physisorption isotherms measurement of GO and C_2N .



Figure S8 The C₂N, GO, AC and C₂N@rGO-4% electrode performance