

Supporting Information

Porphyrin Functionalized Carbon Quantum Dots for Enhanced Electrochemiluminescence and Sensitive Detection of Cu²⁺

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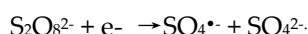
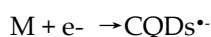
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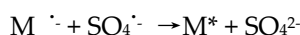
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And it was illustrated as follows: (M represents CQDs-TMPyP)

(1) Reduction reaction on electrode surface:



(2) The formation of excited states:



(3) The excited state returns to the ground state:

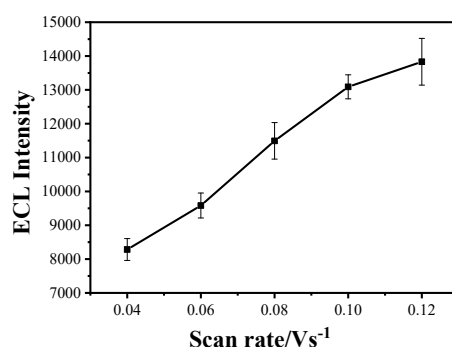
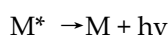


Figure S1. The ECL response of this biosensor for different scan rates.

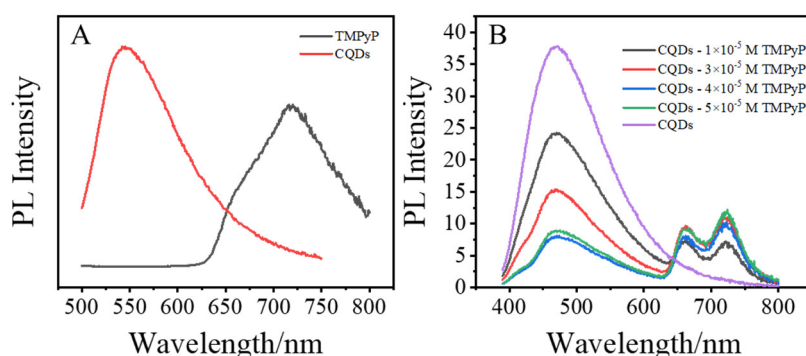


Figure S2. The fluorescence of CQDs and TMPyP; CQDs-TMPyP. (A) The fluorescence of CQDs (excitation peak 370 nm) and TMPyP (excitation peak 480 nm); (B) The fluorescence of CQDs-TMPyP with adding different amount of TMPyP (excitation peak 370 nm).

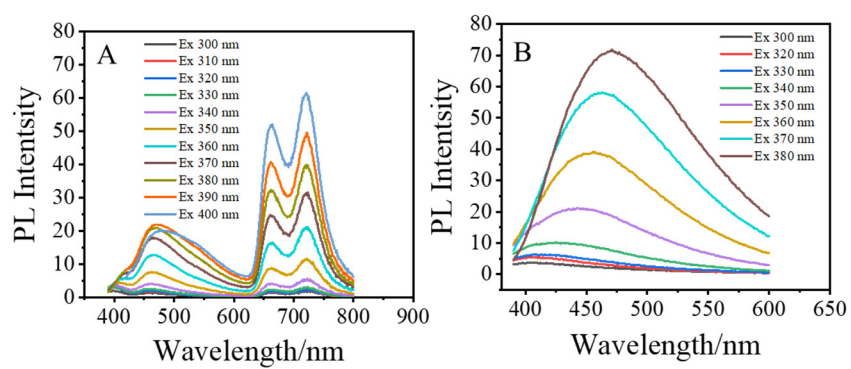


Figure S3. The florescence of TMPyP (A) and CQDs (B) at different excitation peaks.