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ACCEPTED MANUSCRIPT

Highly sensitive electrochemiluminescent sensing platform based on graphite carbon nitride nanosheets for detection of Pyrophosphate

Ion in the synovial fluid

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Abstract

Graphite carbon nitride nanosheets (g-C₃N₄ NSs) are the promising metal-free polymer-like semiconductor nanomaterials, which exhibit excellent electrochemiluminescence (ECL) behavior. The g-C₃N₄ NSs modified the glass carbon electrode showed the obvious ECL response using $10 \text{ mM S}_2\text{O}_8^{2^-}$ as the co-reactant at the scan rate of 0.1 V/s. The presence of Cu²⁺ would quench ECL emission due to the photo induced electron transfer (PET). Pyrophosphate anion (PPi),

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