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Supporting Information

Origami Paper-Based Electrochemical Immunosensor with Carbon Nanohorns-Decorated Nanoporous Gold for Zearalenone Detection

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S1. Theoretical model

In order to know the electroactive surface area, the Randles–Sevcik equation was used at scan rate from 20 to 300 mV s^{-1} [1,2].

$$Ip = \pm 2.69 \times 10^5 \, n^{3/2} \, D^{1/2} \, A \, C \, v^{1/2}$$

where Ip is the anodic or cathodic peak current, C is the $[Fe(CN)_6]^{4-}$ concentration in bulk solution (1 mmol L^{-1}). D is the standard diffusion coefficient of $[Fe(CN)_6]^{4-}$ in solution (7.6 × 10^{-6} cm^2 s^{-1} at 0.1 mol L^{-1} KCl), $v^{1/2}$ is the square root of potential scan rate and A is the electroactive surface area (cm^2).

S2. XRD spectrum

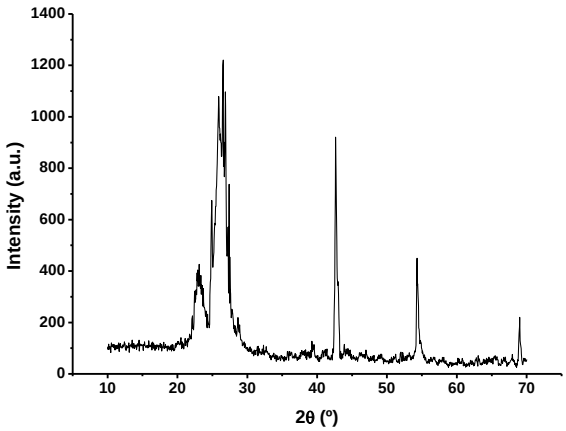

Figure S1. The XRD pattern of the GPE/CNH/GNP crystalline structure.

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