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Ultrasensitive electrochemical immunosensor for procalcitonin with signal enhancement based on zinc nanoparticles functionalized ordered mesoporous carbon-silica nanocomposites

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Highlights

- A novel and sensitive strategy for procalcitonin (PCT) determination was developed.
- Well-dispersed uniform zinc nanoparticles-functionalized ordered mesoporous carbon-silica nano-composites with good hydrophilic was synthesized and functionalized as labels, which can provide a better hydrophilic and biocompatible environment for enhancing protein loading and maintaining the activity of biomolecules , greatly amplifying the detection signals .

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