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# Three-dimensional graphene nanosheet doped with gold nanoparticles as electrochemical DNA biosensor for bacterial detection

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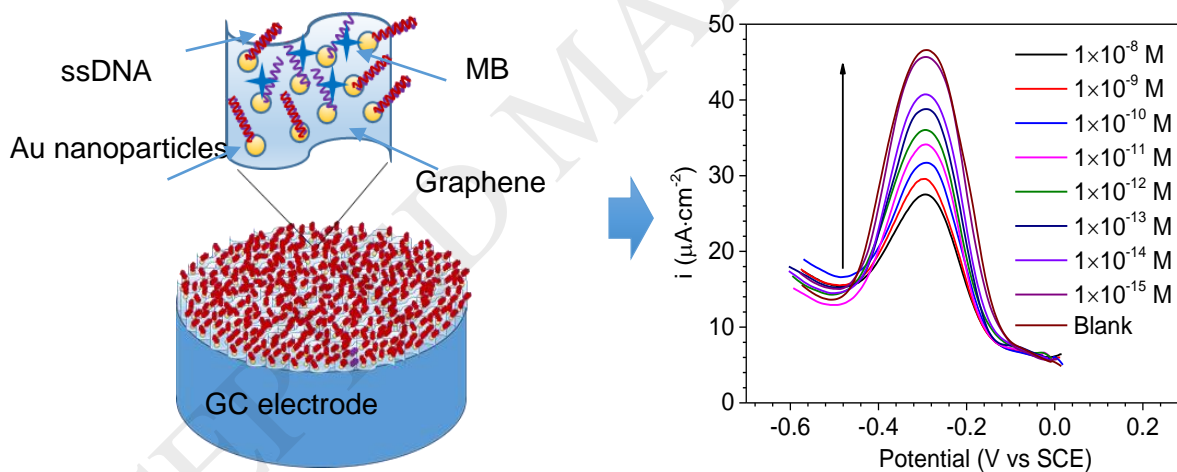
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## Graphical Abstract:



## Highlights

- Developed an electrochemical biosensor for SRB DNA detection
- Fabricated graphene/Au nanoparticle composites for enhanced sensitivity
- Improved the selectivity of the biosensor for SRB detection
- Applied successfully in the field fluid for bacterial detection

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