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Graphene oxide supported liposomes for efficient label free electrochemical DNA biosensing

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Highlights

- Liposome interaction on graphite, graphene and reduced graphene oxides is examined electrochemically
- Selective reduction of hydroxyl and epoxide functional groups on GO made electrochemically
- Intact liposome vesicles tethered only on carboxyl groups of graphene oxide
- Sensitive label free DNA sensing showed the lowest detection limit of 10^{-17} M with linear range of 10^{-15} to 10^{-6} M

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