



Activation of commercial Pt/C catalyst towards glucose electro-oxidation by irreversible Bi adsorption

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**Highlights**

- Bi is irreversibly adsorbed on commercial carbon supported Pt catalyst
- Bi layer is extremely stable in neutral phosphate buffer
- Glucose oxidation rate can be increased with sub-monolayer Bi on Pt/C
- Poisoning of Pt/C by glucose is significantly reduced by sub-monolayer Bi
- In acid, neutral and alkaline, 6-8 fold glucose oxidation rate increase is reached

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