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Title: Non-enzymatic Amperometric Detection of Phenol and Catechol using Nanoporous Gold

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Highlights

- Nanoporous gold (NPG) thin films were prepared by dealloying of AuSi films on a Si wafer.
- Repeated amperometric sensing of phenol and catechol with prepared NPG thin films realized at neutral pH without using enzyme.
- Detection range of NPG thin films towards phenol and catechol were much larger than those values reported in literature with similar or better sensitivity
- NPG thin films showed good resistance against electrode fouling at neutral pH.

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