

## Supplementary Information

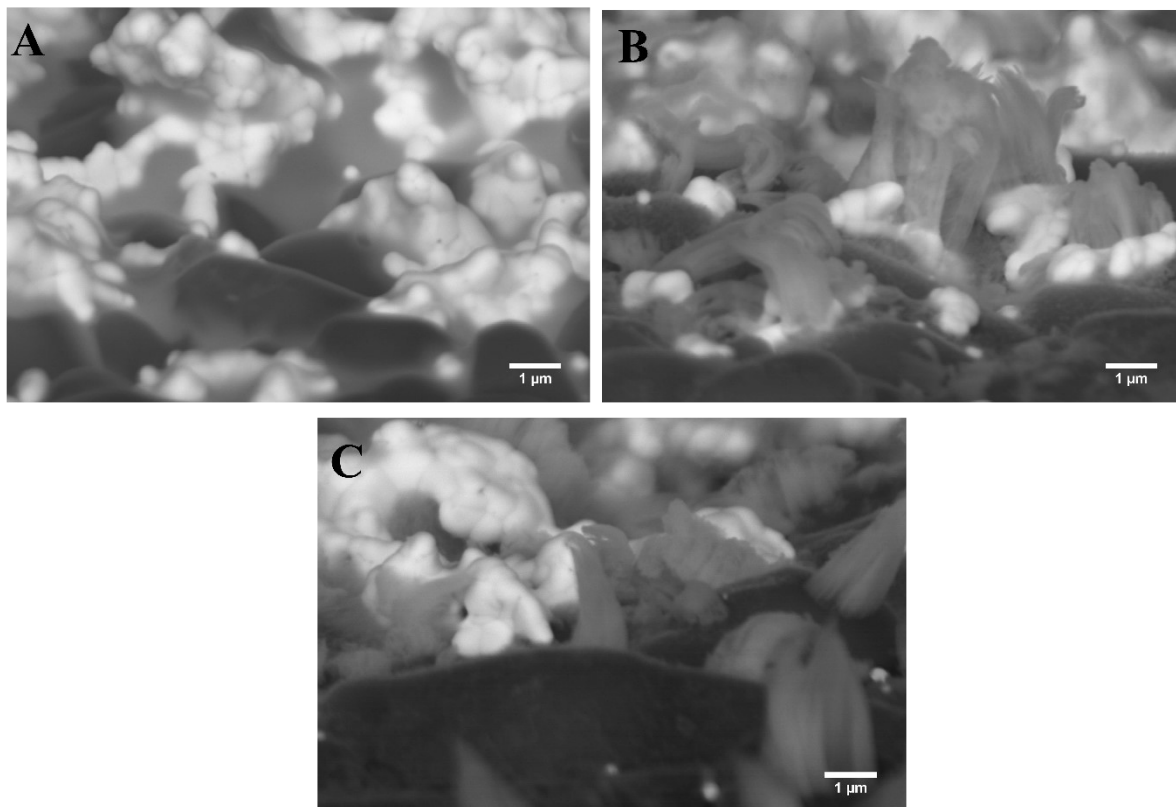
### Lab on Skin: Real-time Metabolite Monitoring with Polyphenol film based Subdermal Wearable Patches

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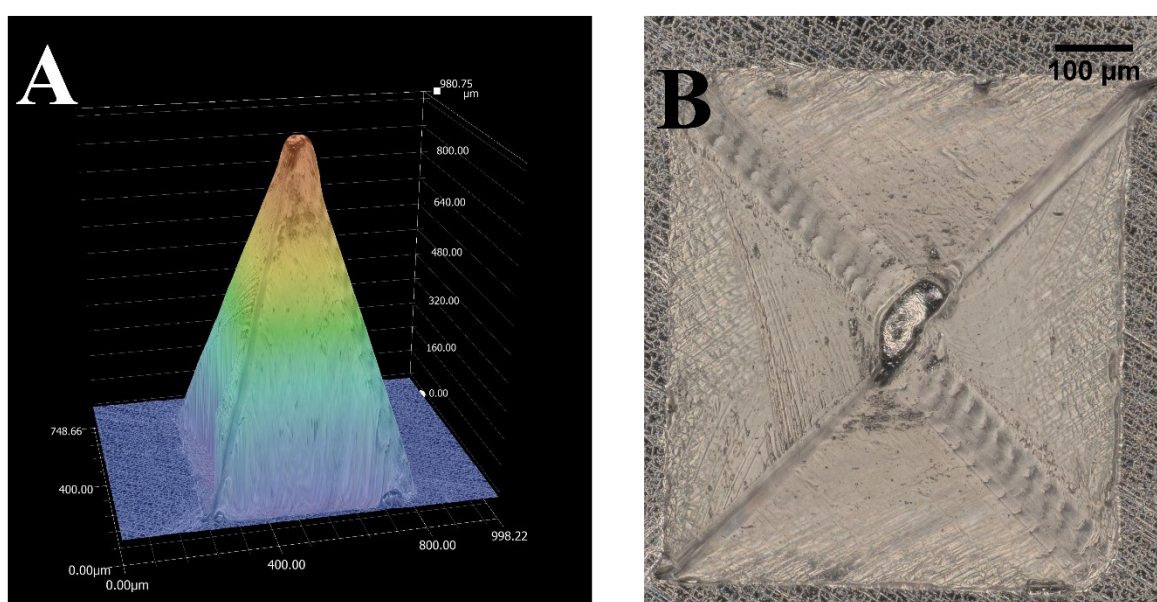
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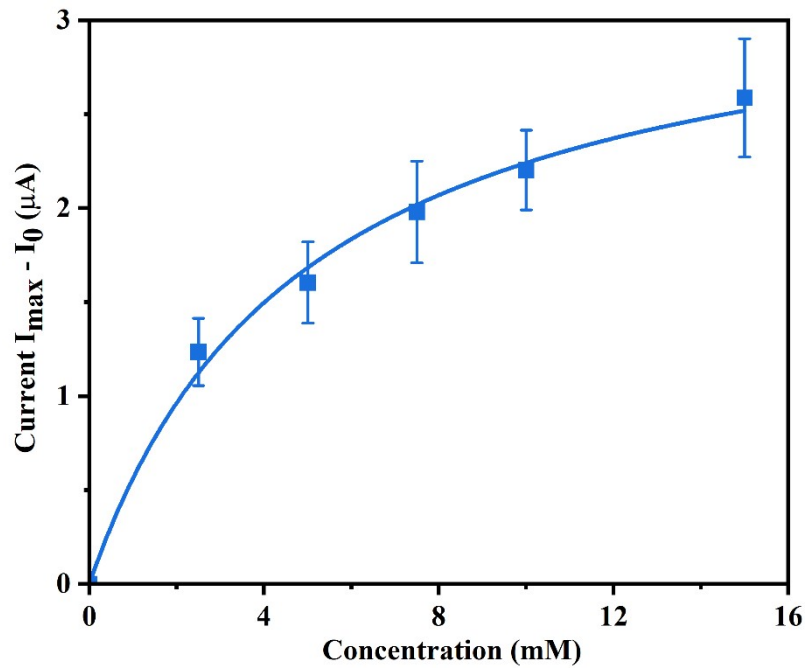
Email: [arjun.ajithmohan@swansea.ac.uk](mailto:arjun.ajithmohan@swansea.ac.uk); [sanjiv.sharma@swansea.ac.uk](mailto:sanjiv.sharma@swansea.ac.uk)



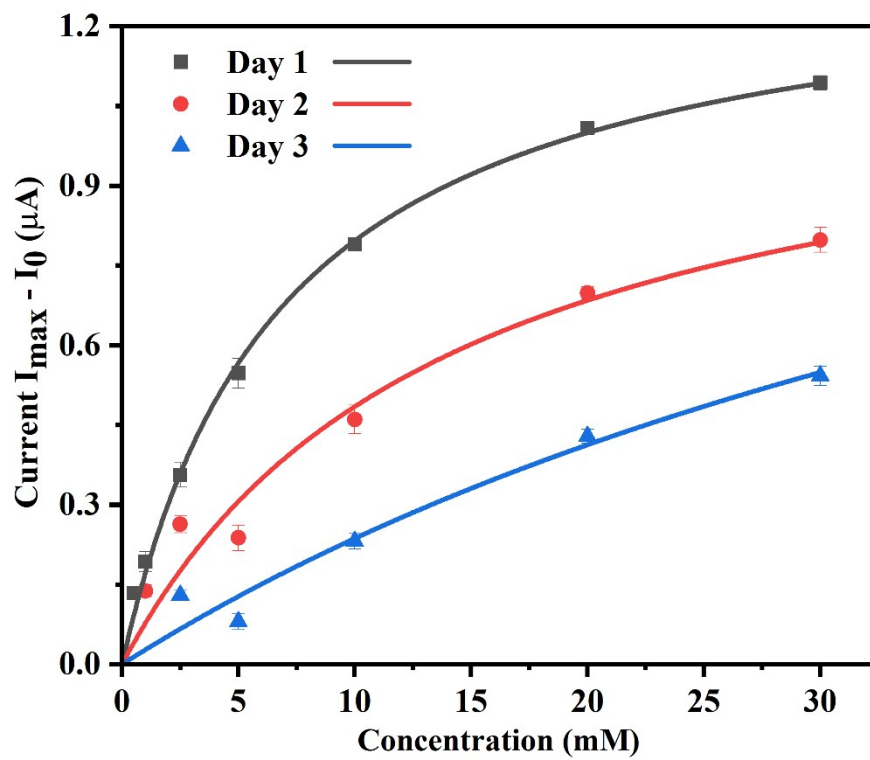
**Figure S1:** SEM images of (A) Pt SPE, (B) Pt SPE modified with polyphenol@GOx, and (C) Pt SPE modified with polyphenol@LOx



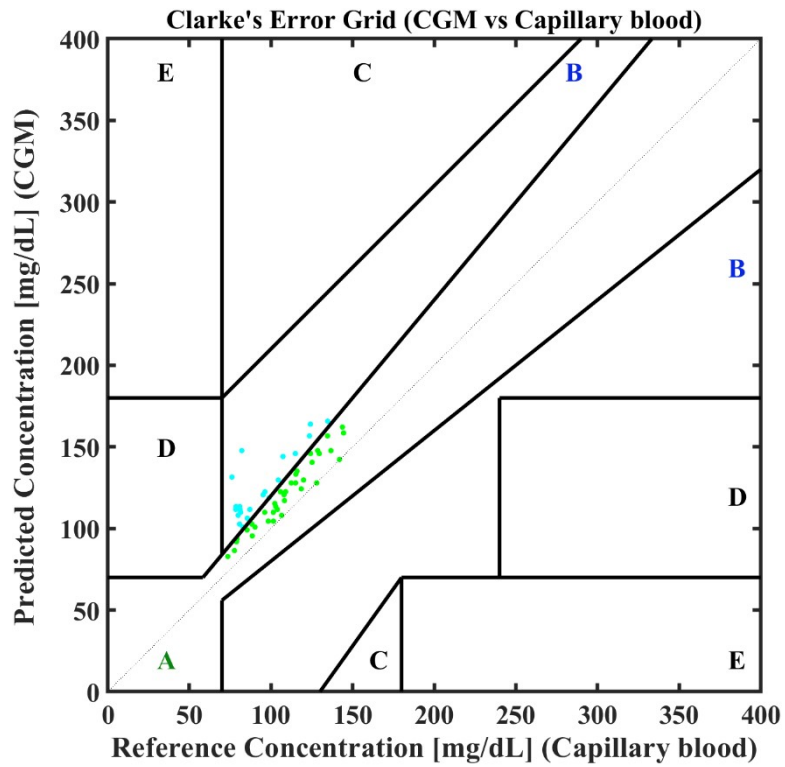
**Figure S2:** Microscopy images of (A) side view and (B) top view of single pyramid of the patch



**Figure S3:** *In vitro* studies carried out on polyphenol GOx modified MN patches for detection of different concentrations of glucose.



**Figure S4:** *In vitro* biofouling studies carried out on Pt SPEs by immersing them in artificial ISF containing bovine serum albumin.



**Figure S5:** CGE showing the predicted concentration from the CGM in comparison to reference concentrations from capillary blood measurements.