

## Supplementary Information

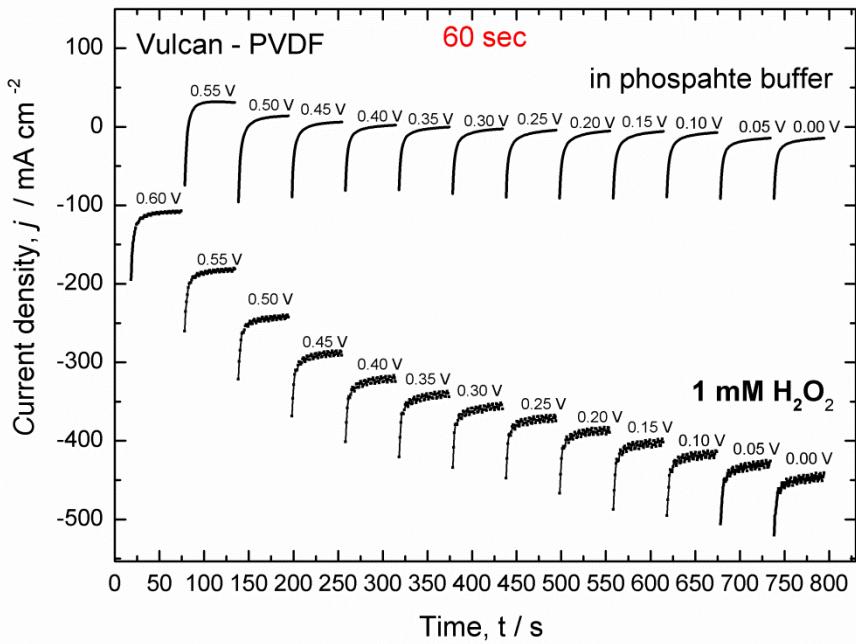
### Combined Electrochemical and Microscopic Study of Porous Enzymatic Electrodes with Direct Electron Transfer Mechanism

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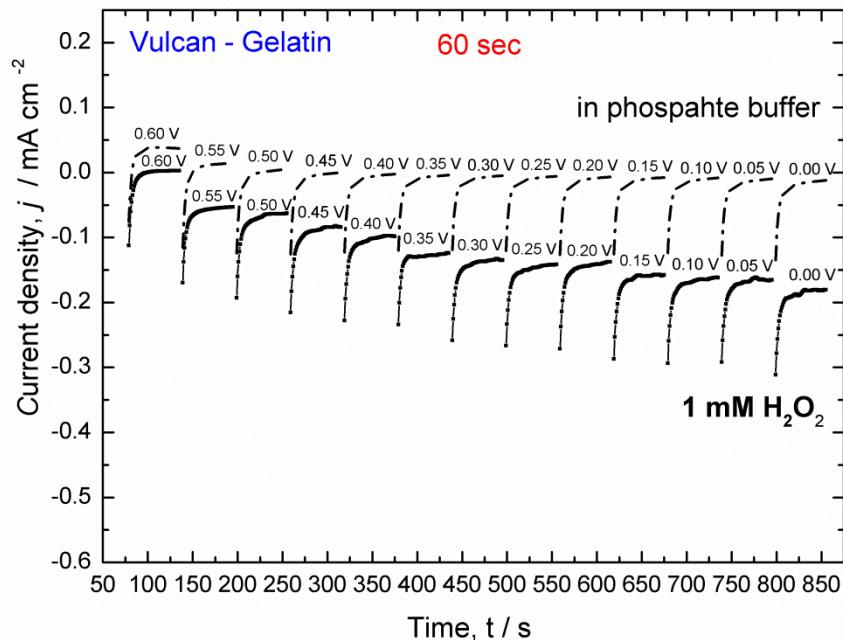
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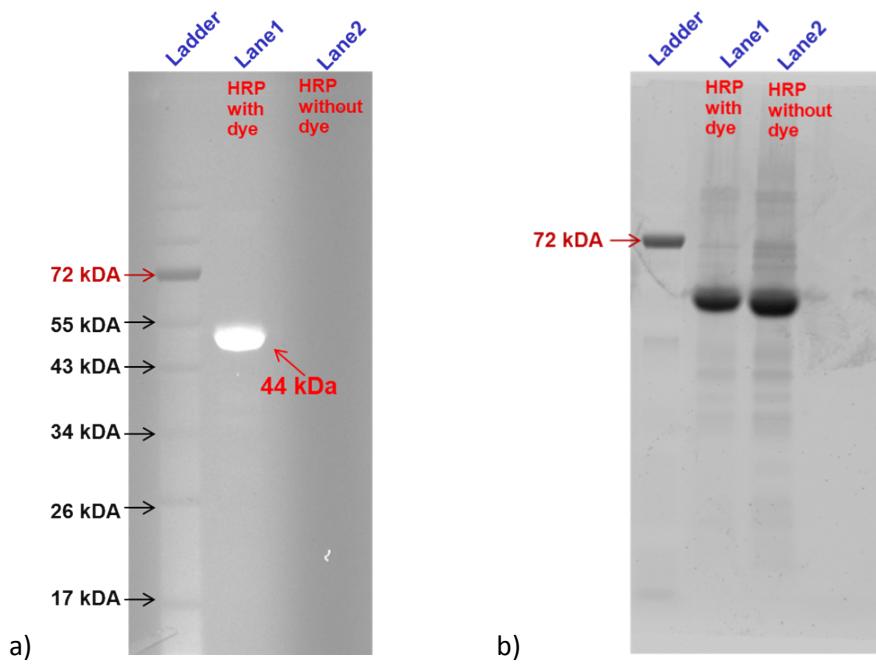


a)

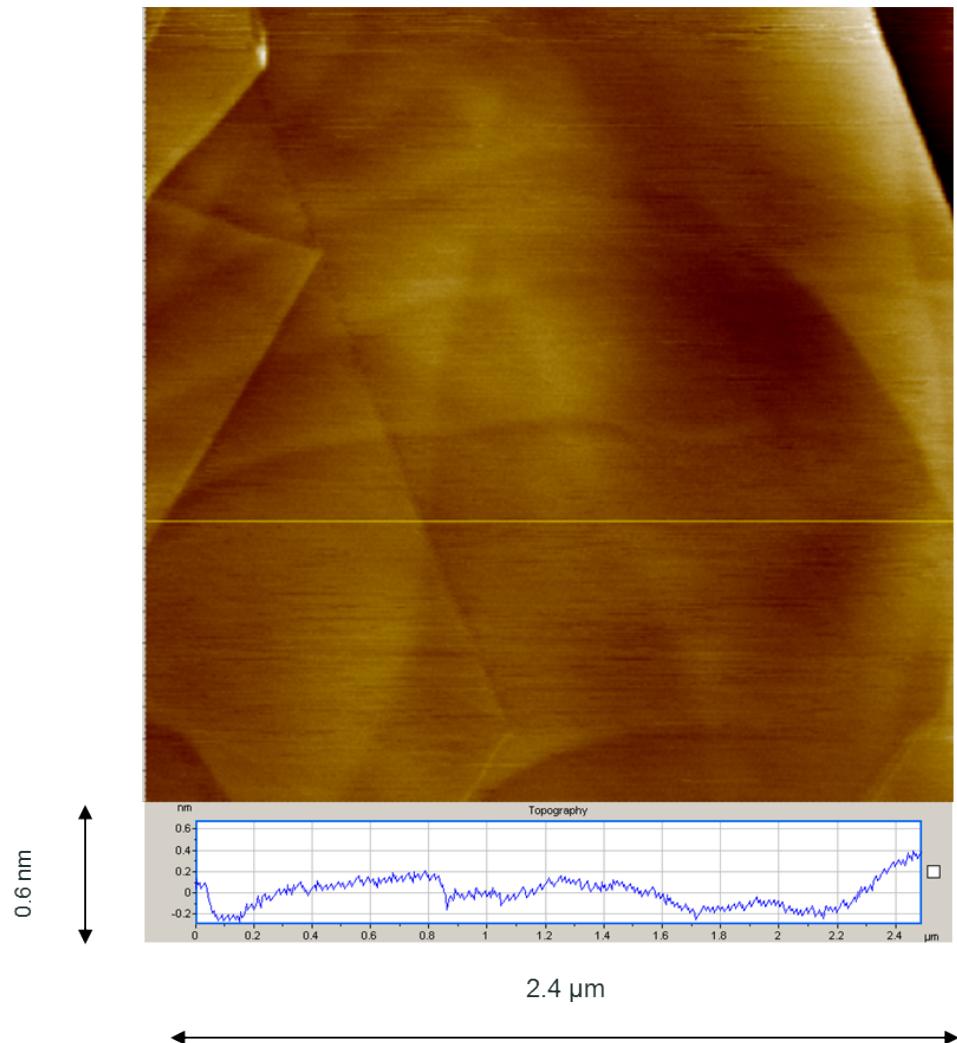


b)

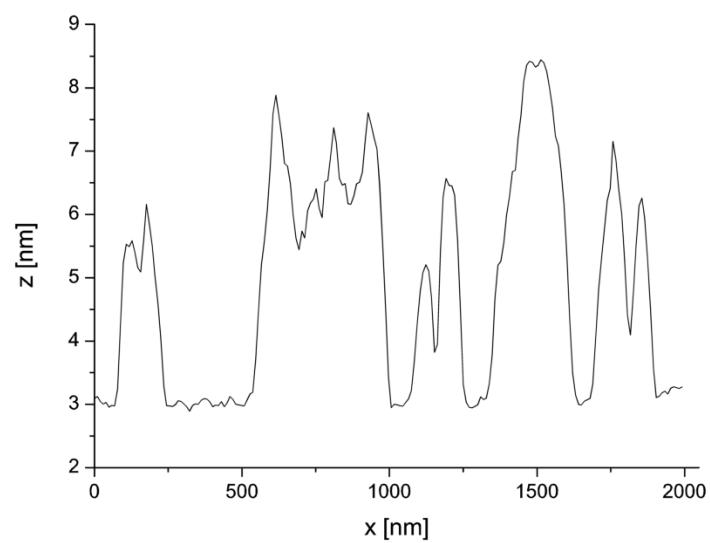
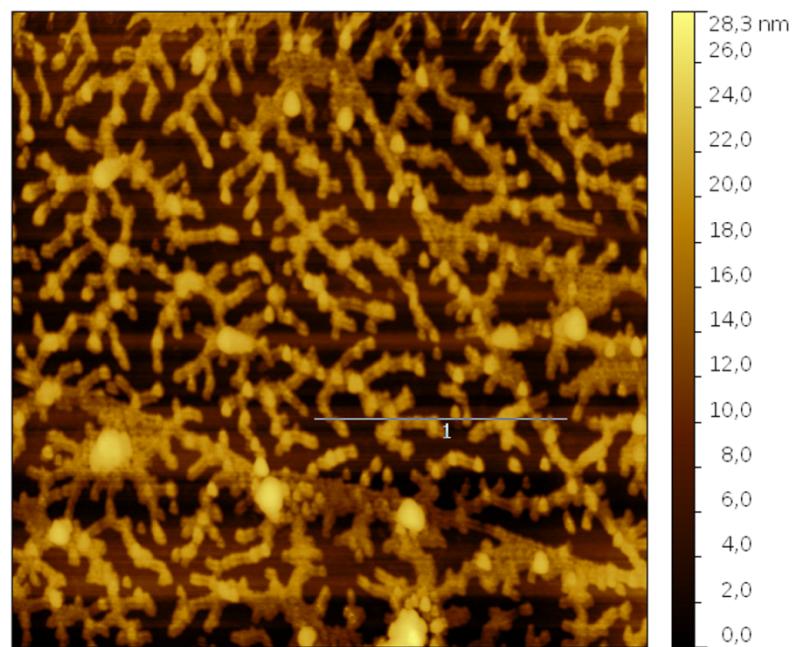
**Fig. S1** Chronoamperometric responses of a) Vulcan –PVDF and b) Vulcan-Gelatin electrodes, Conditions: pH 6, 400 rpm



**Fig. S2** Electrophoresis measurements: a) gel observed under UV lamp after separation before standard staining procedure and b) gel with all separated proteins after staining procedure



**Fig. S3** AFM image of HOPG surface before modification with HRP



**Fig. S4** AFM image of HRP adsorbed on HOPG in a monolayer at pH 7.2