

Supporting information for:

Evidence of monolayer formation from diazonium grafting with radical scavenger: AFM and XPS monitoring.

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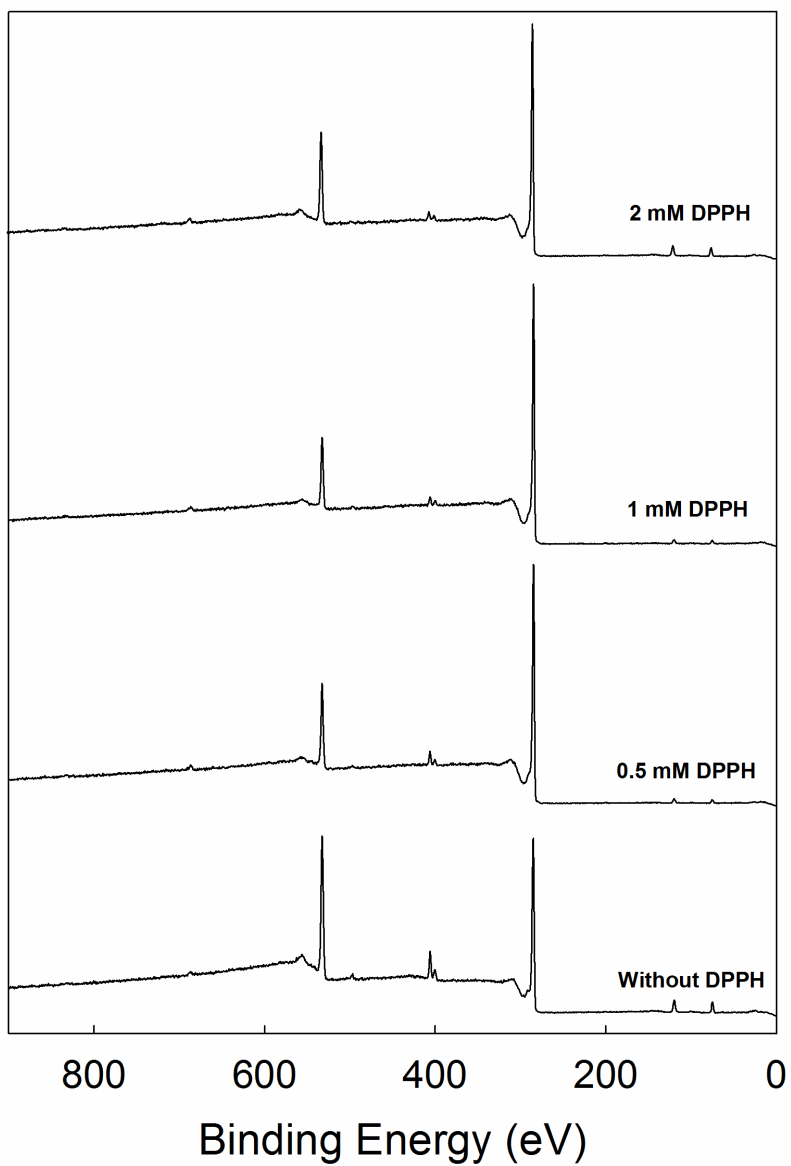


Figure S1: XPS survey spectra of glassy carbon modified with NBD without and with increasing DPPH concentrations.

Table S1. Atomic composition of the glassy carbon surface modified by electrochemical reduction of 4-nitrobenzenediazonium salt without and with DPPH.

grafting conditions	C 1s	O 1s	N1 s 406 eV	N 1s 400 eV	N / C
bare	91.2	9.4		0.4	
NBD (1 mM)	69.75	23.07	5.38	1.8	0.122
NBD (1 mM) + (0.5 mM) DPPH	84.38	12.34	2.38	0.91	0.046
NBD (1 mM) + (1 mM) DPPH	87.46	10.29	1.55	0.71	0.031
NBD (1 mM) + (2 mM) DPPH	83.63	14.02	1.56	0.79	0.033

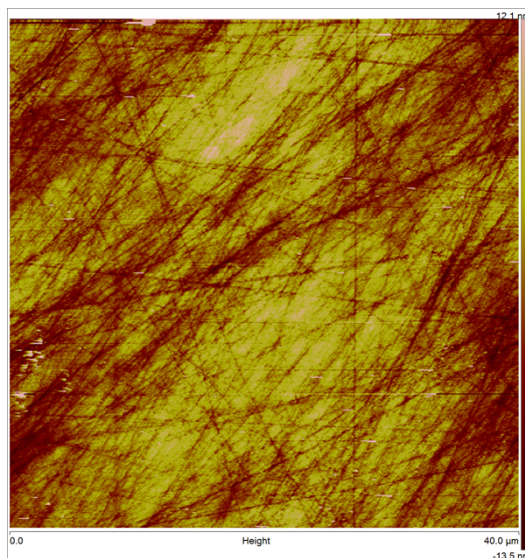


Figure S2. AFM image of a polished glassy carbon surface.

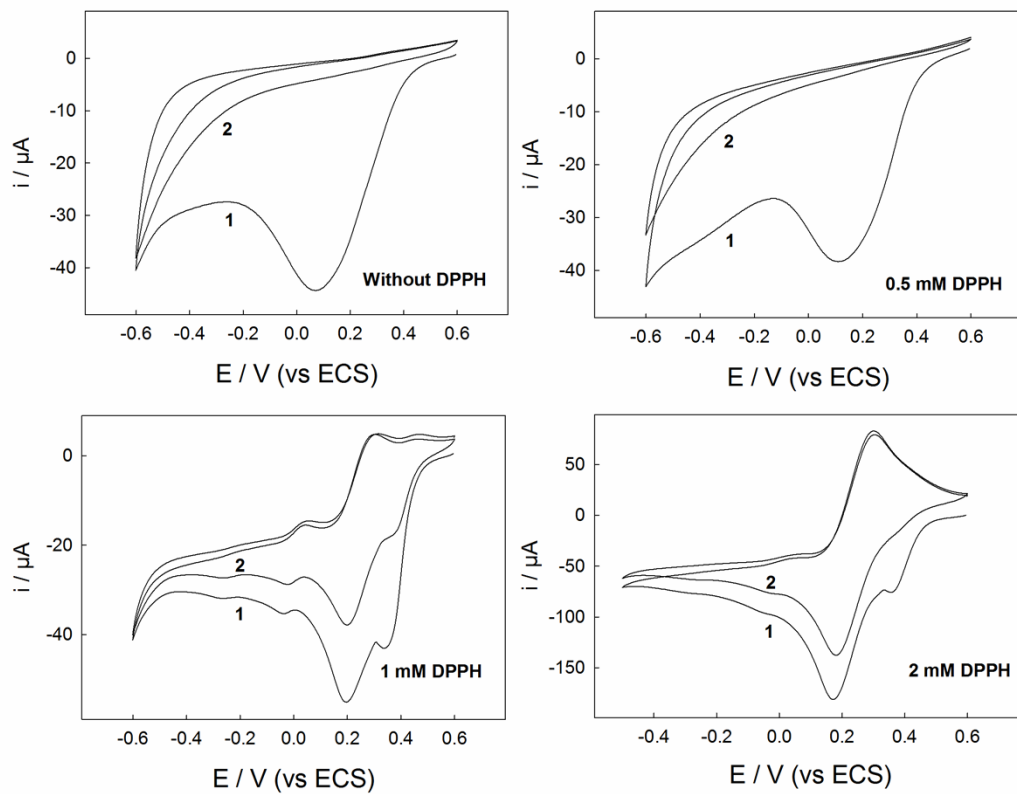


Figure S3. First and second CV cycle recorded in CH_3CN $0.1 \text{ nBu}_4\text{NPF}_6$ containing 1 mM of 4-nitrobenzenediazonium on a PPF electrode at 50 mV/s without and with increasing DPPH concentrations.

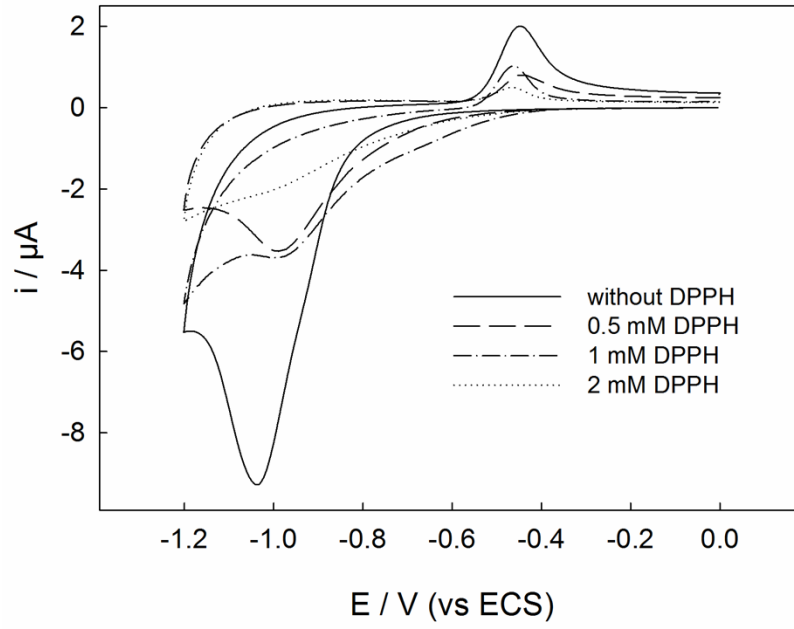


Figure S4. CVs (first cycle) recorded in aqueous 0.1M KOH on modified PPF electrode at 50 mV/s.