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Supplementary Material

Electrochemical restructuring of copper surfaces using organic additives and its

effect on the electrocatalytic reduction of nitrate ions

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Figure S1: SEM images of an unmodified Cu electrode



Figure S2: SEM images of a Cu electrode subjected to 20 potential cycles between -1.5 and 0.5 V at a sweep rate of 10 mV s⁻¹ in 1 M NaOH containing (a) no additive, (b) 0.1 M benzyl alcohol and (c) 0.1 M phenyl acetic acid. Scale bar is 5 μ m in all cases.



Figure S3: Cu $2p_{3/2}$ (a, c) and O 1S (b, d) XPS spectra for a Cu electrode subjected to 20 potential cycles between -1.5 and 0.5 V at a sweep rate of 10 mV s⁻¹ in 1 M NaOH containing 0.1 M benzylalcohol (a, b) and 0.1 M phenylacetic acid (c, d).