

Supporting Information

Catalytic selectivity of metallophthalocyanines for electrochemical nitric oxide sensing

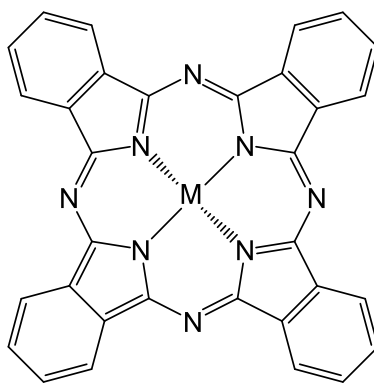
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M = Fe, Co, Ni, Zn

Figure S1. Chemical structure of the metallophthalocyanines used in this study.

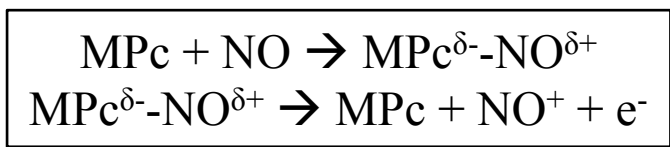


Figure S2. Metallophthalocyanine-mediated oxidation of nitric oxide. The symbol δ^+ indicates a partial charge transfer to the MPc complex, not necessarily localized at the metal center.

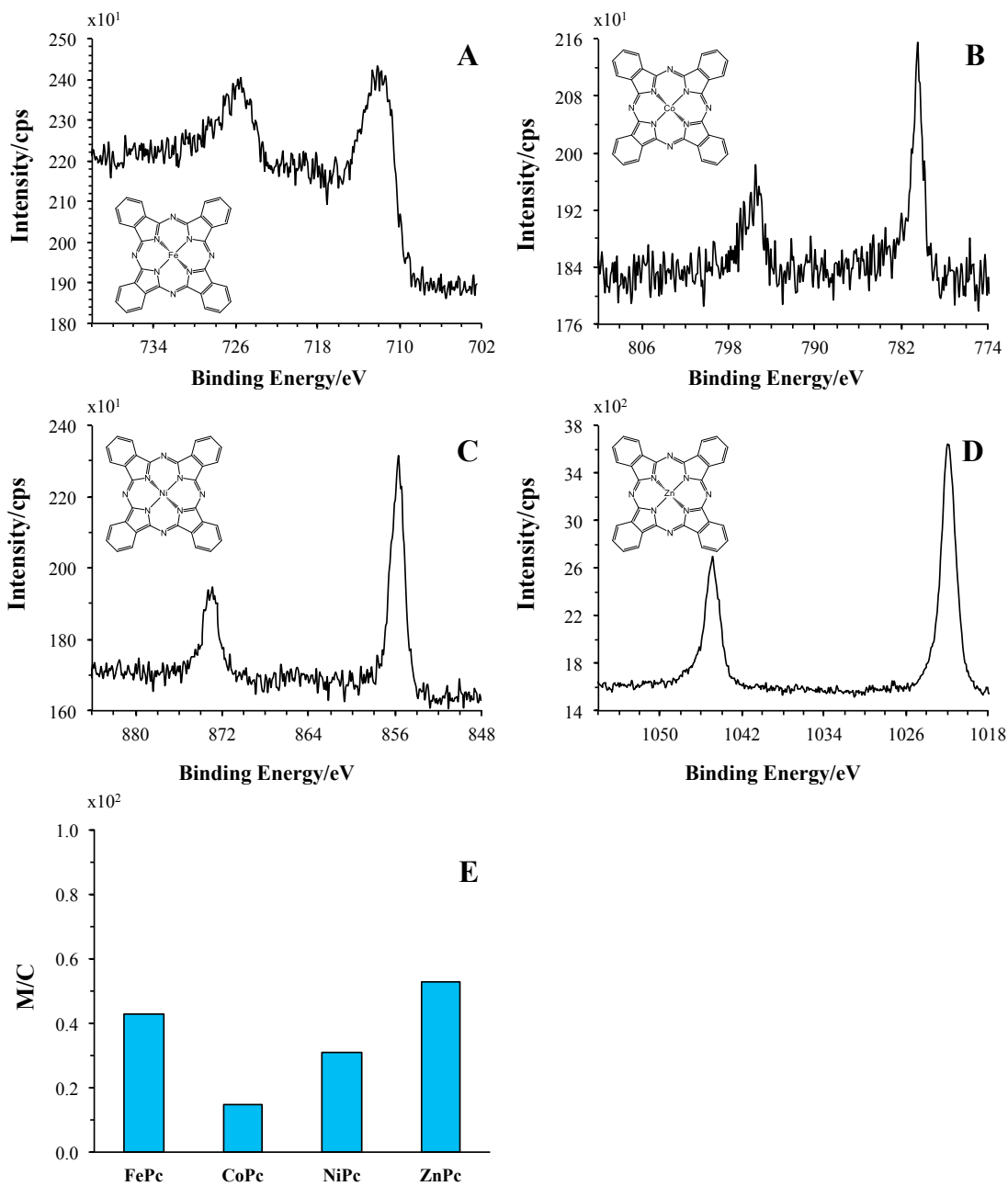


Figure S3. High-resolution scans of the signature 2p peaks of the transition metal centers of (A) iron-phthalocyanine (FePc), (B) cobalt-phthalocyanine (CoPc), (C) nickel-phthalocyanine (NiPc), and (D) zinc-phthalocyanine (ZnPc) deposited on glassy carbon (GC). (E) M/C atomic ratios of different MPC-modifications on GC calculated using Kratos Vision software.

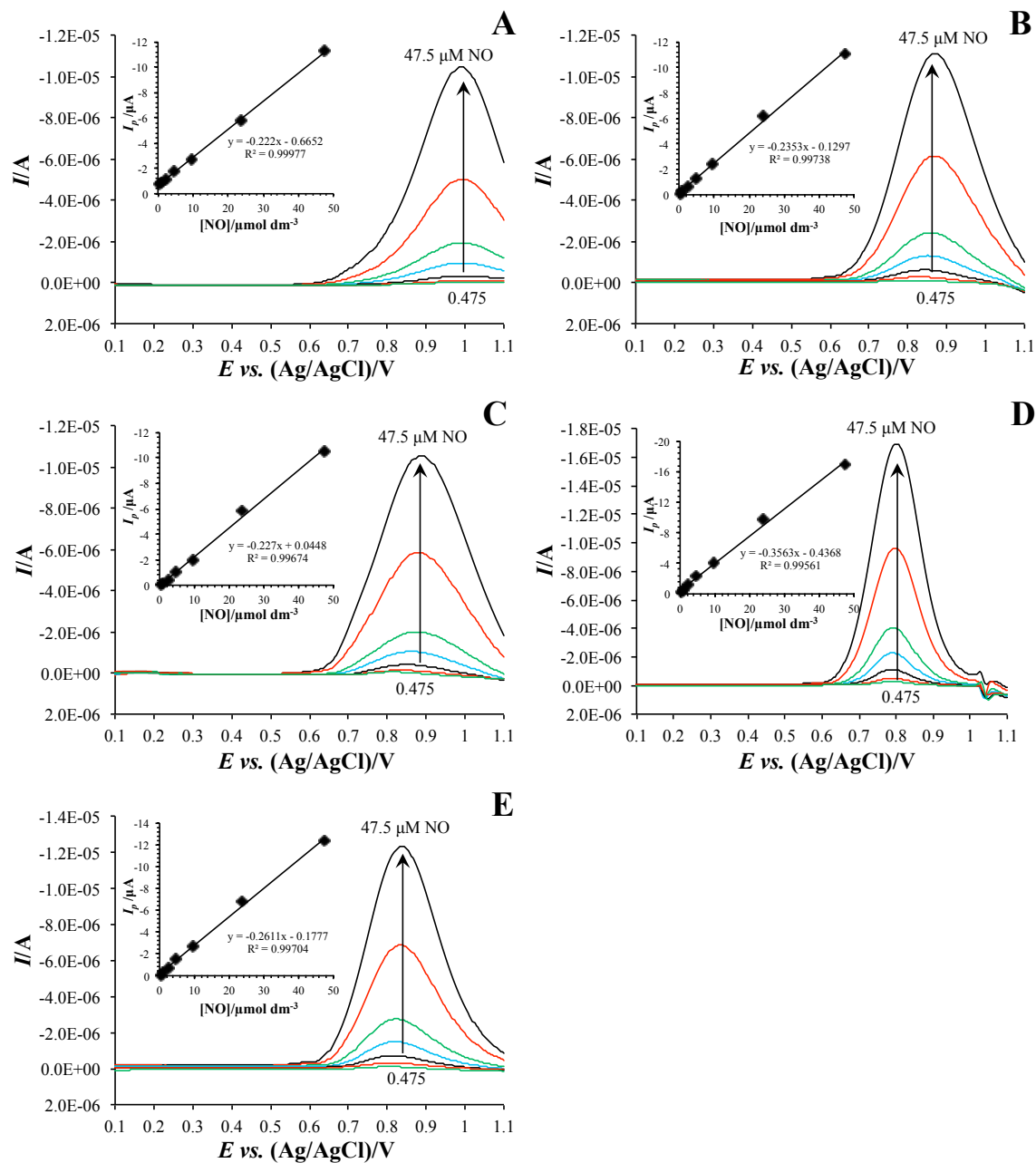


Figure S4. Representative overlays of the DPV traces collected in the presence of various concentrations of NO in PBS on (A) bare, (B) FePc-modified, (C) CoPc-modified, (D) NiPc-modified, and (E) ZnPc-modified GC electrodes (Insets: respective calibration curves from the peak currents as a function of NO concentration). Blank DPV scans collected over the same potential range in PBS were subtracted from all traces.

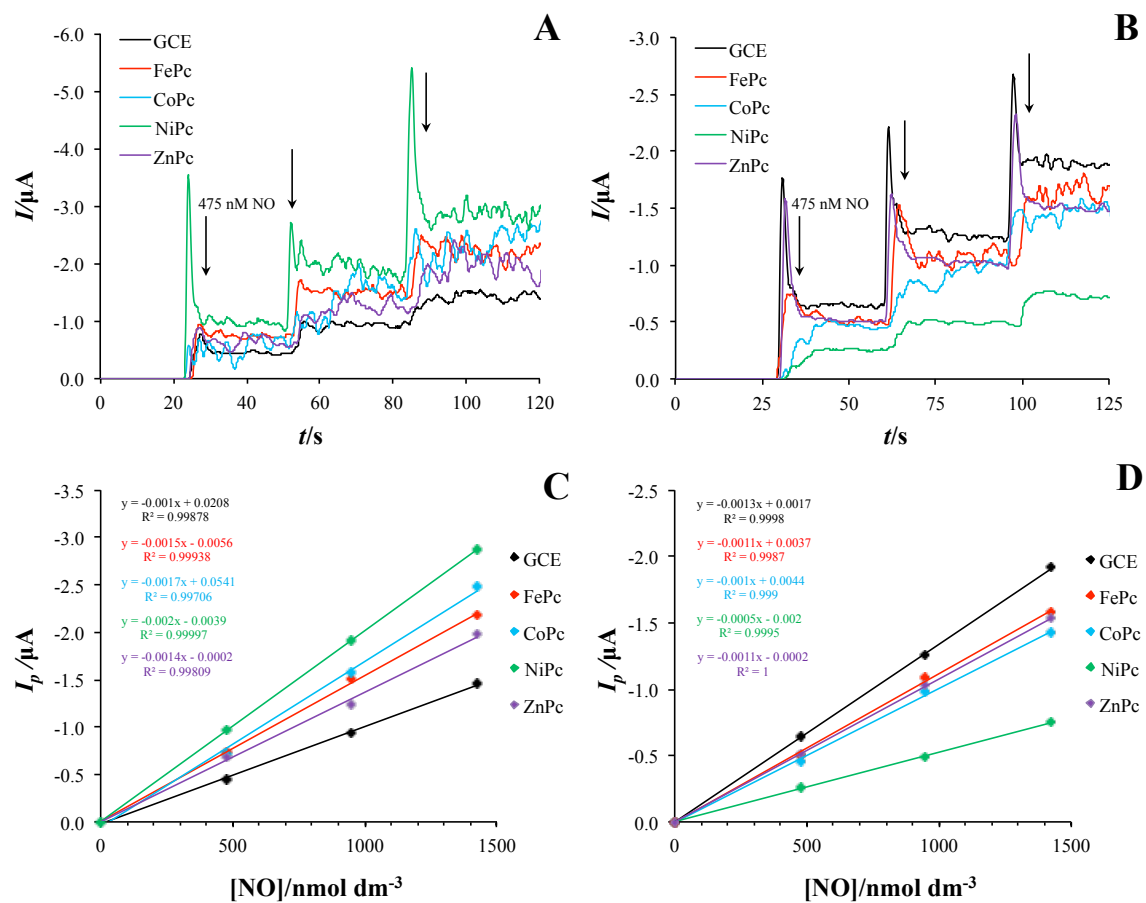


Figure S5. (A) Background-subtracted representative amperograms of bare and MPc-modified GC electrodes with subsequent injections of NO in PBS with an applied potential of +1022 mV and (B) an applied potential equivalent to the anodic peak potential $E_{a,NO}$ of each sensor. (C, D) Calibration plots of the current as a function of NO concentration with respect to amperograms (A) and (B), respectively.