

Supplementary Information of “Bubble-Propelled Micromotors for Ammonia Generation”

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This supplementary information file contains:

Supplementary Figures S1-S8

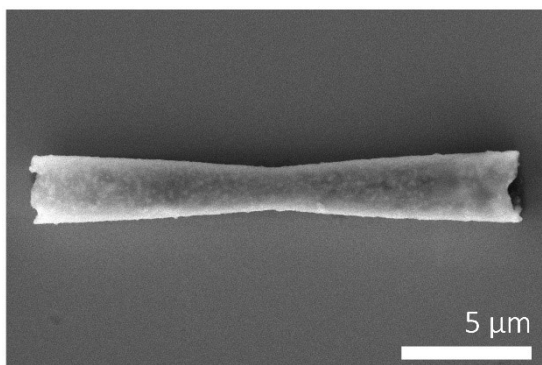


Figure S1. High-resolution FESEM image of a silica microtube.

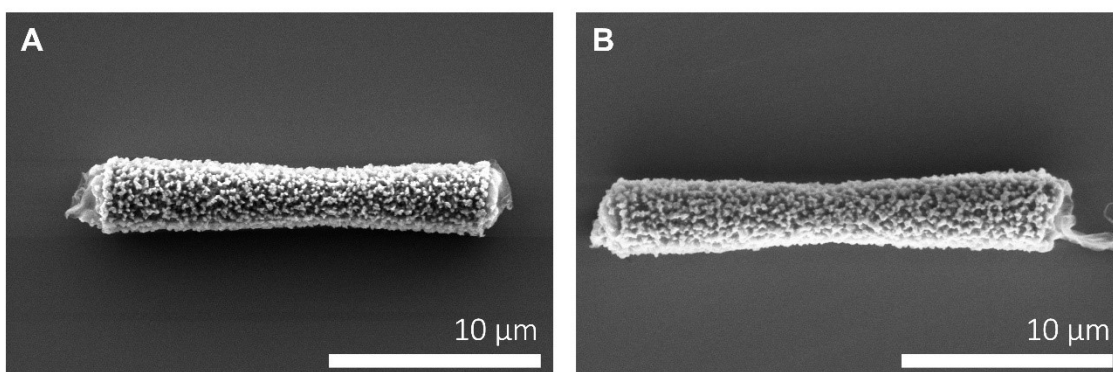


Figure S2. High-resolution FESEM images of a MnO₂ micromotor **A)** before and **B)** after the laccase functionalization.

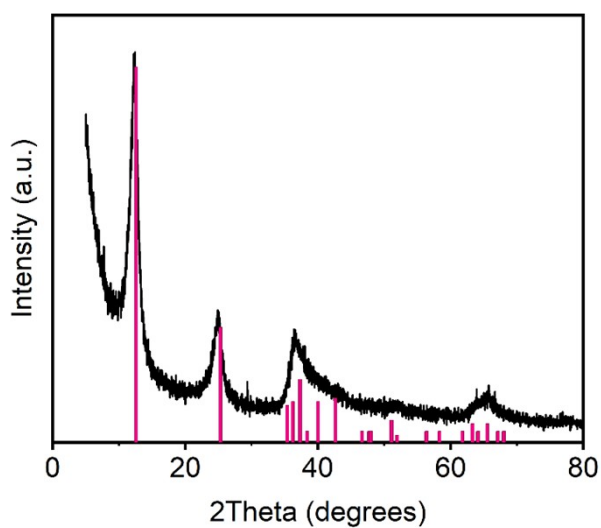


Figure S3. XRD of MnO₂ micromotors.

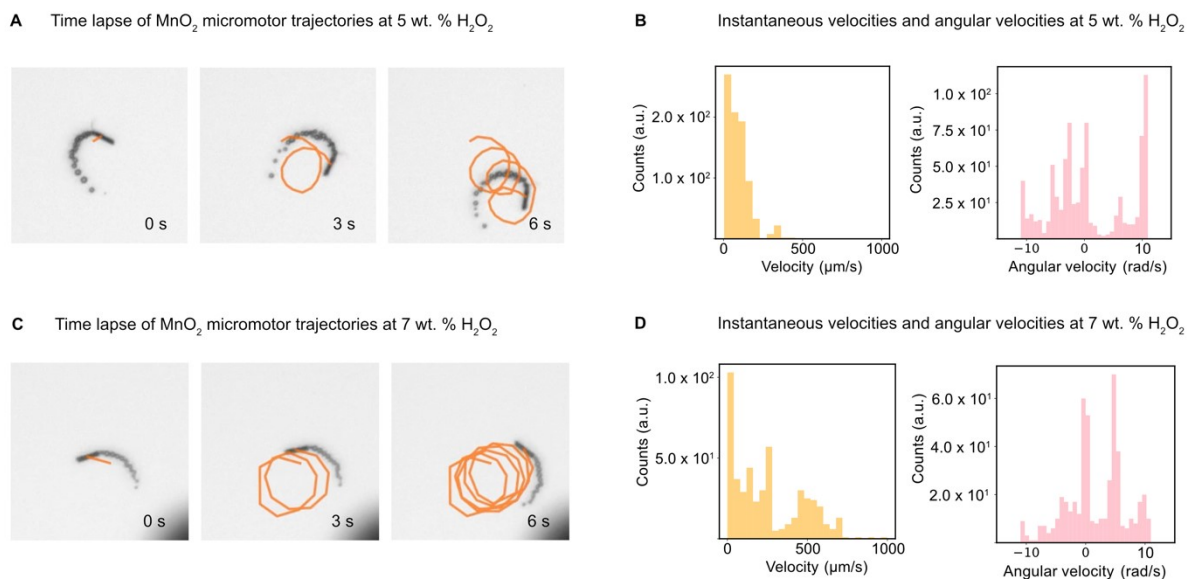


Figure S4. Motion characterization of the MnO₂ micromotors at different H₂O₂ concentrations. **A)** MnO₂ micromotors trajectories with 5% (w/w) H₂O₂. **B)** Velocities and angular velocities for the 5% (w/w) H₂O₂ collection of trajectories. **C)** MnO₂ micromotors trajectories with 7% (w/w) H₂O₂. **D)** Velocities and angular velocities for the 7% (w/w) H₂O₂ collection of trajectories.

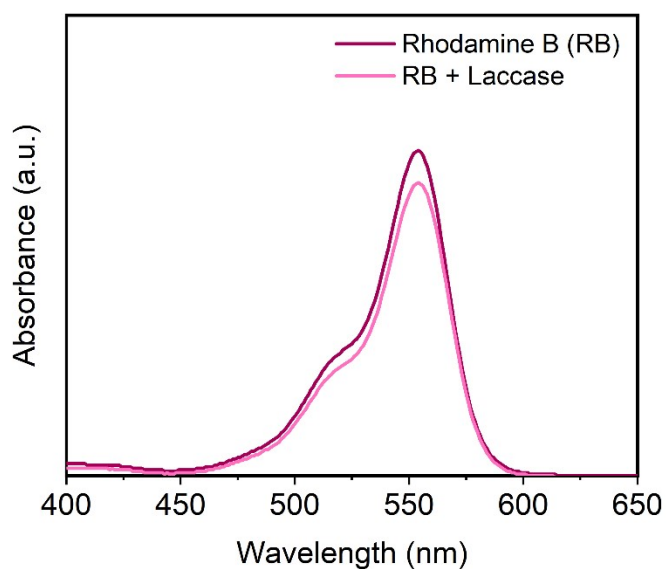


Figure S5. UV-vis spectra of RB with free laccase after 3h of reaction.

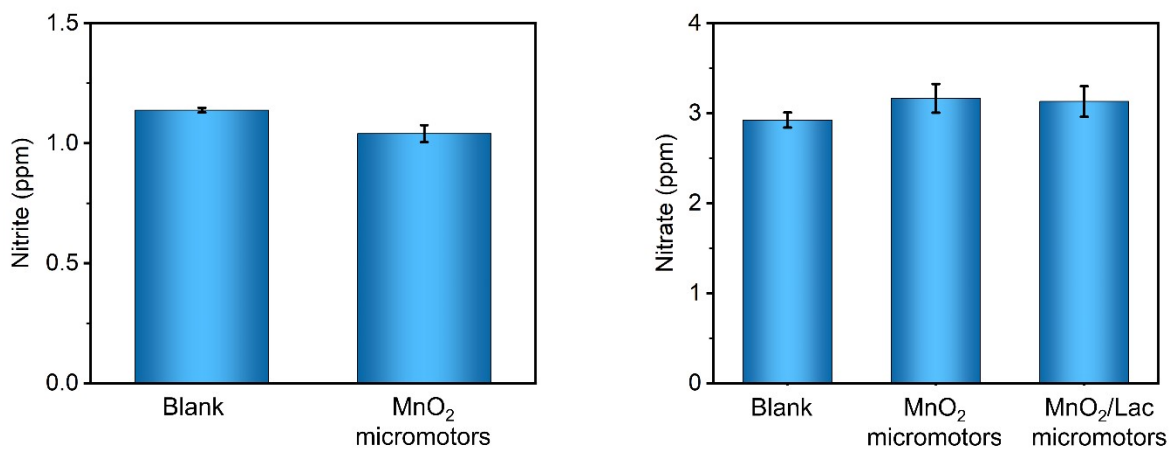


Figure S6. Ion chromatography results for the concentrations of **A)** nitrite and **B)** nitrate ions.

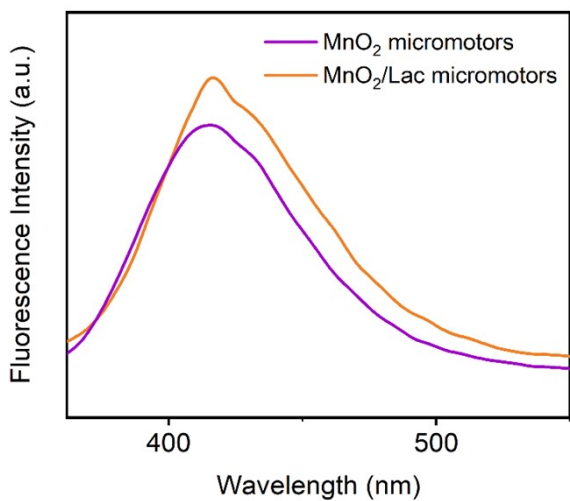


Figure S7. Fluorescence spectra of the terephthalate monohydroxylate isomer generated with MnO₂ and MnO₂/Lac micromotors at 15 min reaction time.

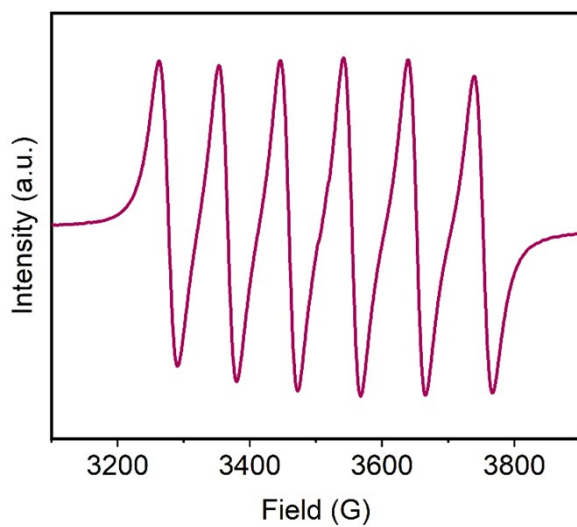


Figure S8. EPR spectrum of the MnO₂ micromotors.