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Supporting Information

Shape Controllable Mn-Fe PBAs Derivatives Micromotors for

Organic Pollutant Removal

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Video S1. Autonomous motion of cubic and spherical Mn-Fe oxides micromotors in 5% H_2O_2 at 450 °C.

Video S2. Directional motion of cubic and spherical Mn-Fe oxides micromotors in 3% H₂O₂ under applied magnetic field.

Video S3. Autonomous motion of cubic Mn-Fe oxides micromotors in 0.3%, 1% and 5% H_2O_2 obtained at 450 °C.

Video S4. Autonomous motion of spherical Mn-Fe oxides micromotors in 0.7%, 5% and 7% H_2O_2 obtained at 450 °C.

Video S5. Autonomous motion of cubic Mn-Fe oxides micromotors in 5% H_2O_2 obtained at 450 °C, 550 °C and 650 °C.



Figure S1. SEM images of derived micromotors at 550 °C (a, b), 650 °C (c, d): microcube (a, c), microsphere(b, d).



Figure S2. XRD pattern (a), XPS spectra of Mn 2p (b), Fe 2p (c) and O 1s (d) of spherical Mn-Fe oxides.



Figure S3 The UV-vis absorption spectra of RhB (2 mg·mL⁻¹) in 4% H_2O_2 solution without cubic Mn-Fe oxides micromotors from 0 min to 30 min.



Figure S4 Degradation of RhB and recovery of micromotors by magnetic field.