

Supporting Information

Shape-controlled fabrication of the polymer-based micromotor based on the polydimethylsiloxane template

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Video S1 The autonomous motion of one solid cylindrical Pt-PCL micromotor (10 μm in diameter and 24 μm in length) in the H_2O_2 aqueous solution.

Video S2 The autonomous motion showing one solid cylindrical Pt-PCL micromotor (60 μm in diameter and 24 μm in height) in the H_2O_2 aqueous solution.

Video S3 The fluorescence video showing the controlled movement of one solid cylindrical Pt-PCL_{circle-60-0.4} containing $\text{Fe}_3\text{O}_4\text{NP}$ and R6G in the H_2O_2 aqueous solution.

Video S4 The autonomous and controlled movement of a hollow cup-like Pt-PCL- Fe_3O_4 micromotor in the H_2O_2 aqueous solution.

Video S5 The cargo manipulation based on the hollow cup-like Pt-PCL- Fe_3O_4 structure. The cargo is the PCL microsphere.