## **Supporting Information (SI)**

## **Dopamine Polymerization in Liquid Marbles: A General Route to Janus Particles Synthesis**

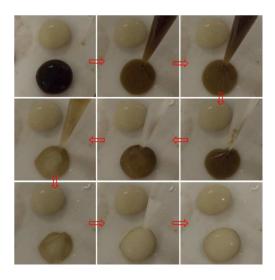
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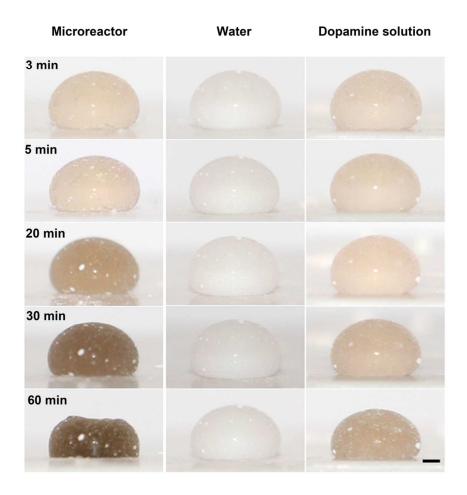
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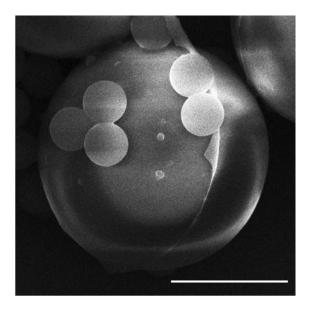
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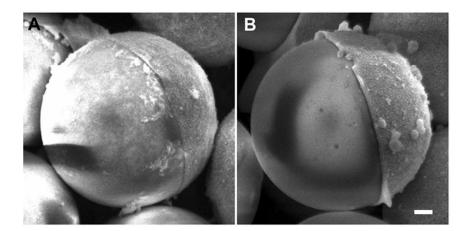
**Figure S1**. Illustration of the transformation of PD/SiO<sub>2</sub> Janus particles into further modified Janus particles via Method 2 as shown in the bottom of Figure 1B.



**Figure S2**. Side view of different liquid marbles at different reaction stages: (A) microreactor; (B) pure water; (C) dopamine hydrochloride aqueous solution (2 mg/mL). Scale bar: 1 mm.



**Figure S3**. SEM image of  $PS(2 \mu m)$ - $PD/SiO_2$  Janus particles synthesized from Method 1 (the top route in the Figure 1B). Scale bar: 5  $\mu m$ .



**Figure S4**. SEM images of Ag-PD hybrid films synthesized via Method 1 (A) and Method 2 (B) from 0.1 mol/L diamminesilver(I) solution. Scale bar:  $1 \mu m$ .