

**Electronic Supplementary Information for Unexpected phenomenon  
in conventional system: Synthesis of raspberry-like hollow periodic  
mesoporous organosilica with controlled structure in one  
continuous step**

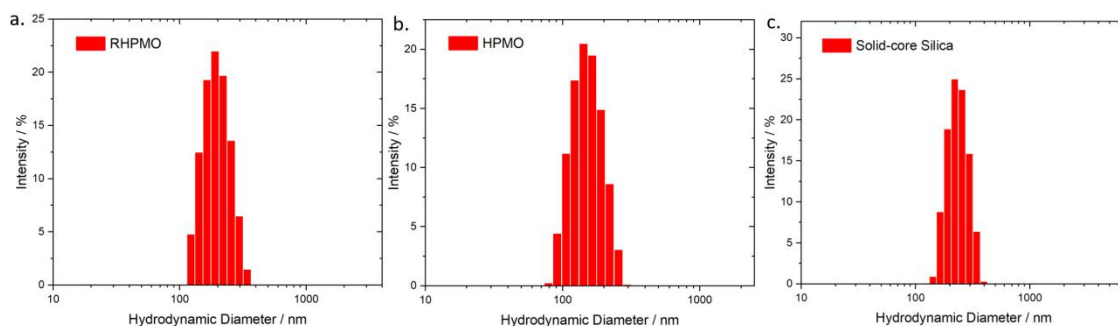
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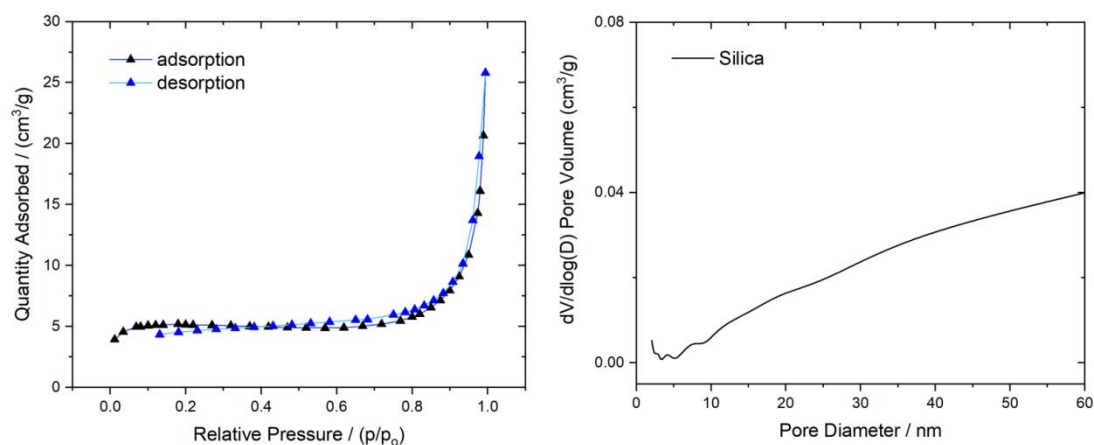
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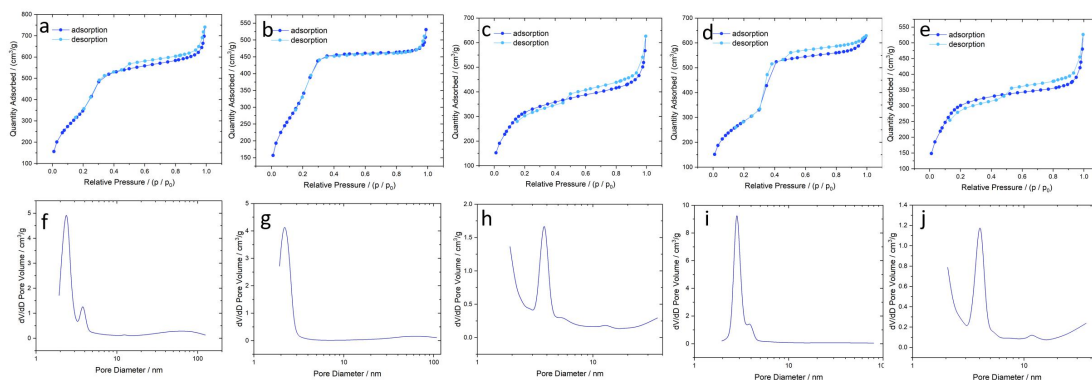
**Supplementary Figures**



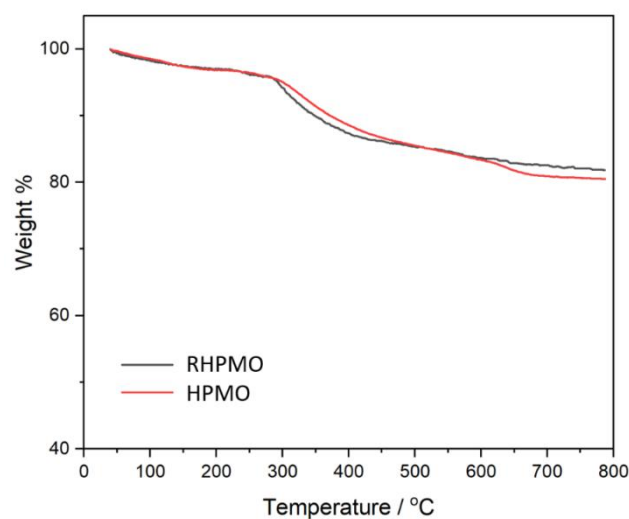
**Fig. S1** Size distribution of (a)RHPMO, (b)HPMO and (c)Solid-core Silica measured by dynamic light scattering (DLS).



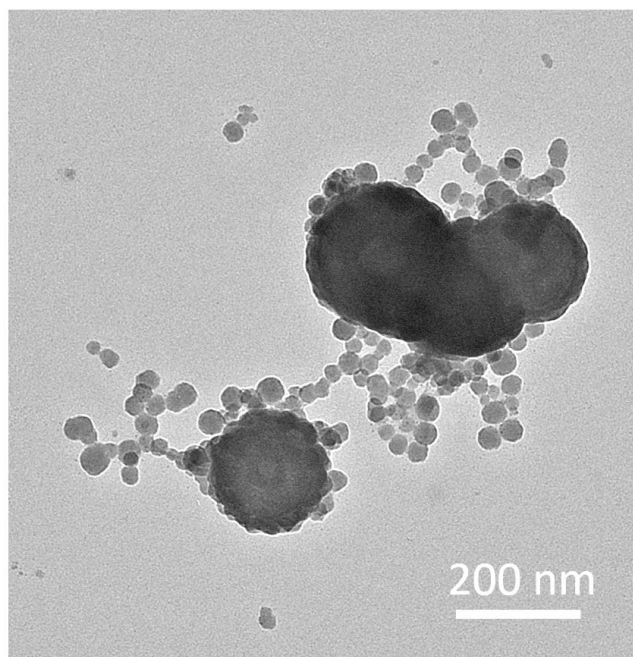
**Fig. S2** The  $N_2$  adsorption isotherm curve and pore distribution of solid-core silica nanoparticles.



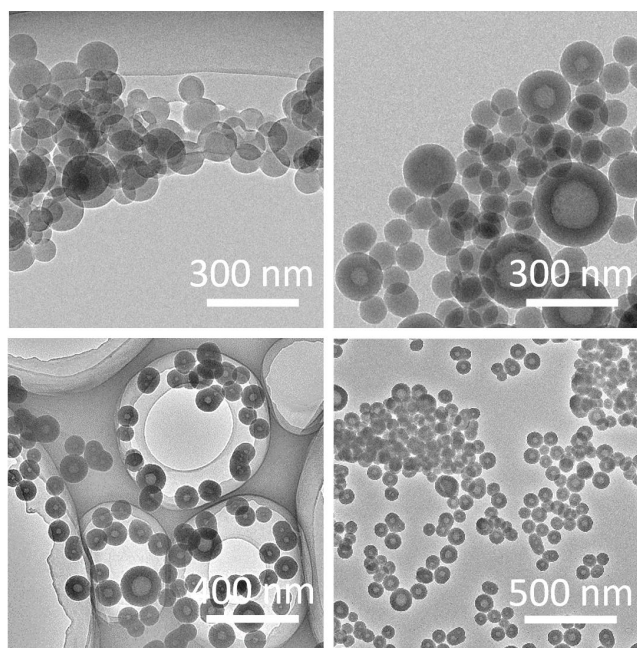
**Fig. S3** The  $N_2$  adsorption isotherm and pore distribution curves of SHPMO and RHPMO samples corresponding to entry 1(a and f), 2(b and g), 3(c and h), 4(d and i) and 5(e and j) in Table 2.



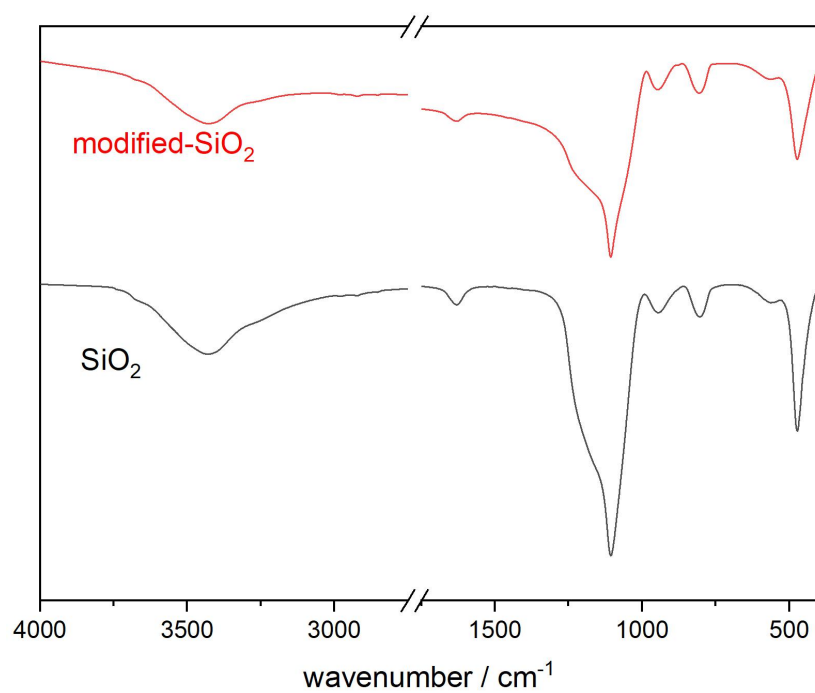
**Fig. S4** Thermal Gravity Analysis (TGA) curve of HPMP and RHPMO. The measuring temperature was ranging from 40°C to 800°C.



**Fig. S5** TEM graph of corona particles adsorbed on the core PMO. An evidence of forming process of RHPMO.



**Fig. S6** Dynamic forming process of the cavity of spherical HPMOs. The TEM graphs were taken at specific time after the onset of the reaction. (a) 30 min, (b) 60 min, (c) 90 min, (d) 120 min.



**Fig. S7** FT-IR curves of silica and FPDTEOS modified silica