

Supporting Information

Palygorskite@Fe₃O₄@polyperfluoroalkylsilane nanocomposites for superoleophobic coatings and magnetic liquid marbles

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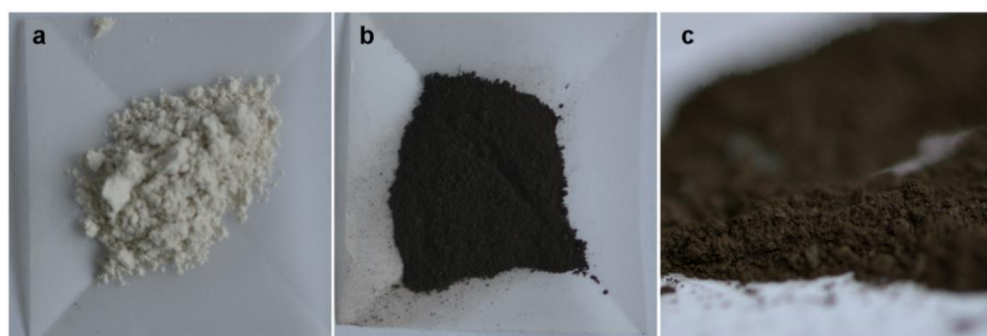


Figure S1. Digital images of (a) PAL, (b) PAL@Fe₃O₄ and (c) PAL@Fe₃O₄@fluoroPOS_{4.0}.

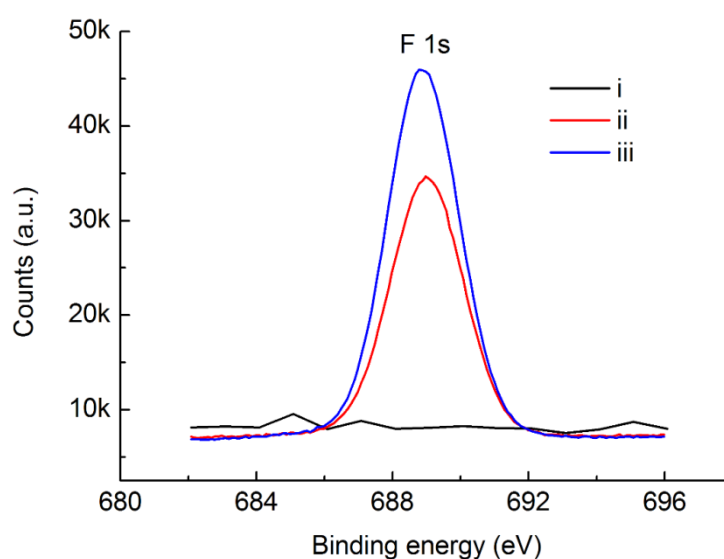
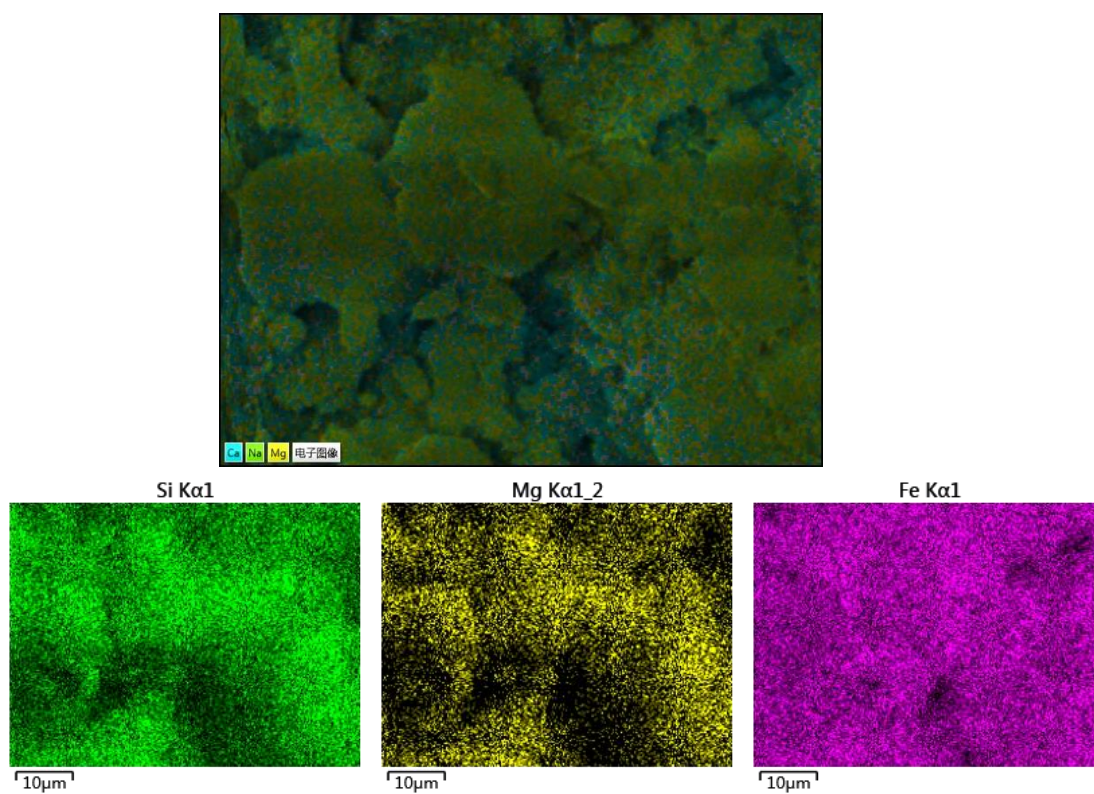
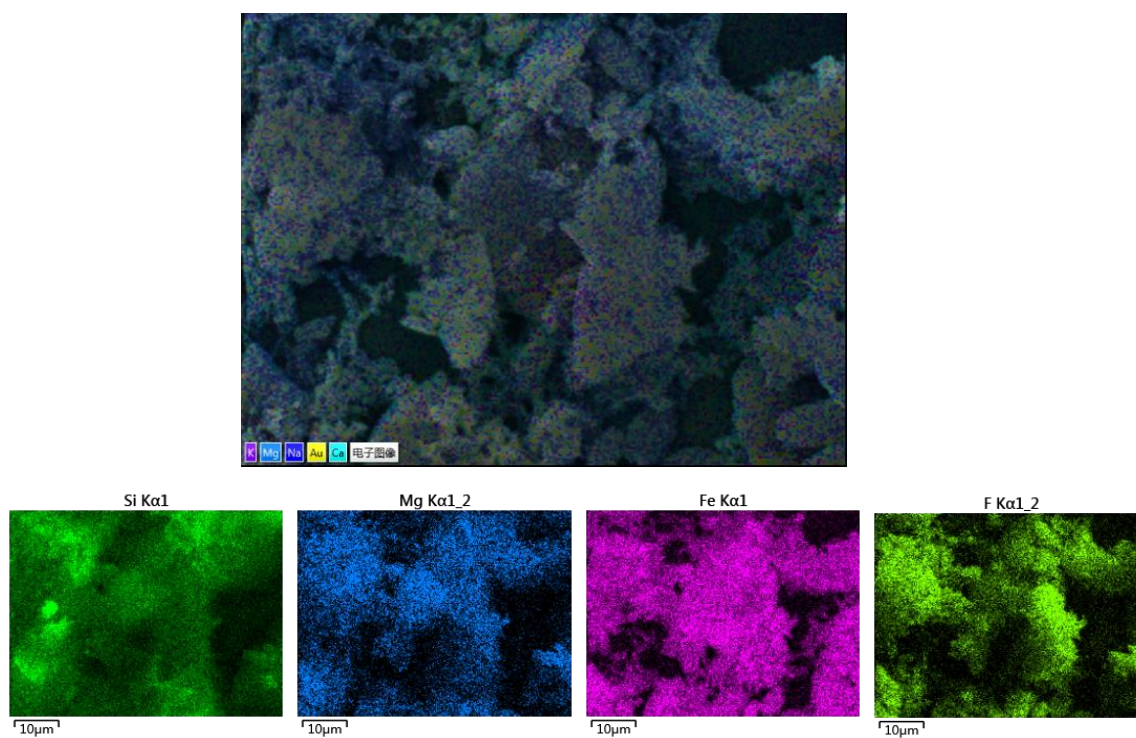


Figure S2. High-resolution F 1s spectra of (i) PAL@Fe₃O₄, (ii) PAL@Fe₃O₄@fluoroPOS_{0.25} and (iii) PAL@Fe₃O₄@fluoroPOS_{4.0}.



(a)



(b)

Figure S3. EDS elemental maps of (a) Si, Mg and Fe in PAL@Fe₃O₄ and (b) Si, Mg, Fe and F in PAL@Fe₃O₄@fluoroPOS_{4.0}.

Movie S1. Slide of various liquid droplets off the 10° tilted PAL@Fe₃O₄@fluoroPOS_{4.0} coated glass slide.

Movie S2. Remote control of the liquid marbles using a magnet on solid surface and water surface.

Movie S3. Rapid movement of the liquid marbles on a piece of paper.

Movie S4. Ejection of the liquid marbles using forceps and playing the liquid marbles freely using a spoon on paper like playing "mini-golf".