

Supplementary materials

1. Photographic images of the EC films after the EC sols being dried for 24 h

Fig. S1 shows the photographic images of the EC films after the EC sols being dried for 24 h. After the EC sols being dried, the EC films are almost self-peeling off the surface of marble, ceramic tile, glass and stainless steel, which are very easy to peel off. The EC film can not be self-peeling off concrete surface, but it can also be peeled off completely.

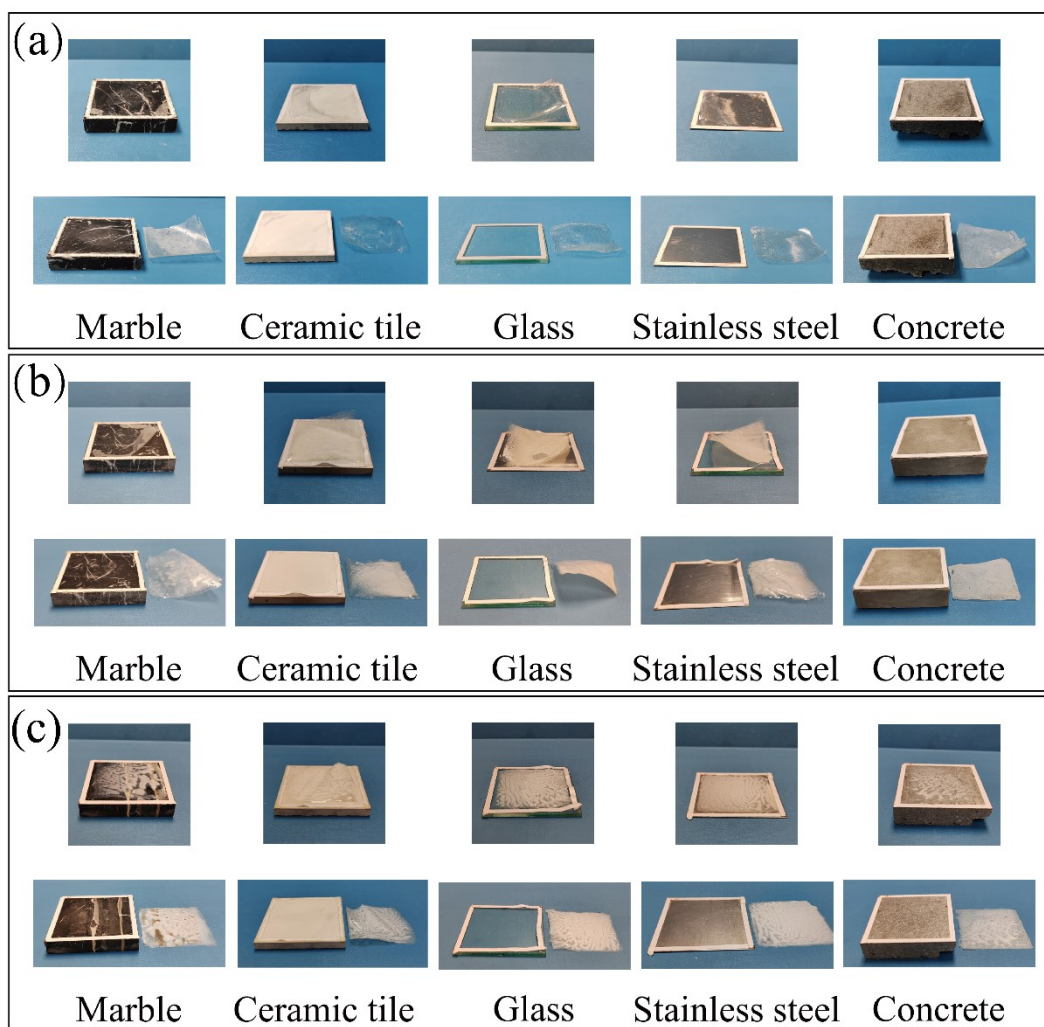


Fig. S1 Photographic images of the EC films after the EC sols being dried for 24 h. (a) at -10°C, (b) at 0°C, (c) at room temperature.

2. Decontamination rates of the EC sols at room temperature

Fig. S2 shows the decontamination rates of the EC sols at room temperature. Obviously, the decontaminating properties of EC sols at the temperature below 0 °C are prior to that at room temperature.

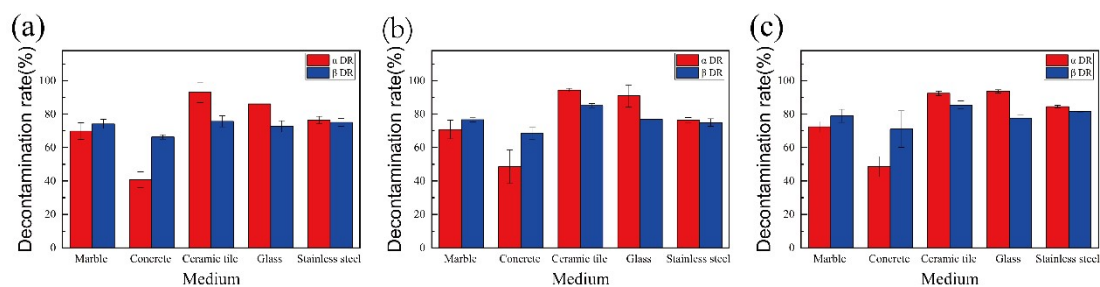


Fig. S2 Decontamination rate on different plates at room temperature. (a) 7% wt.% EC sol, (b) 9% wt.% EC sol, (c) 11% wt.% EC sol.