

Supporting information

Video 1. The water droplet is rolling on SHS;

Video 2. The water droplet is sliding on SLIPS;

Video 3. Water droplets cleaned the diameter of 130 μm fly ash cenospheres on SHS;

Video 4. Water droplets cleaned the diameter of 250 μm fly ash cenospheres on SHS;

Video 5. Water droplets cleaned the diameter of 130 μm fly ash cenospheres on SLIPS;

Video 6. Water droplets cleaned the diameter of 250 μm fly ash cenospheres on SLIPS;

Video 7. The sliding behavior of water droplets on SLIPS after scratched;

Video 8. The sliding behavior of water droplets on SLIPS after heated;

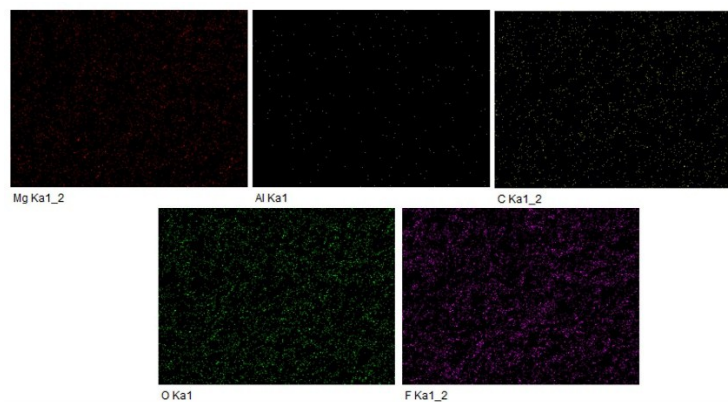


Figure S1. Element mapping of Mg, Al, O, C, F on SLIPS;

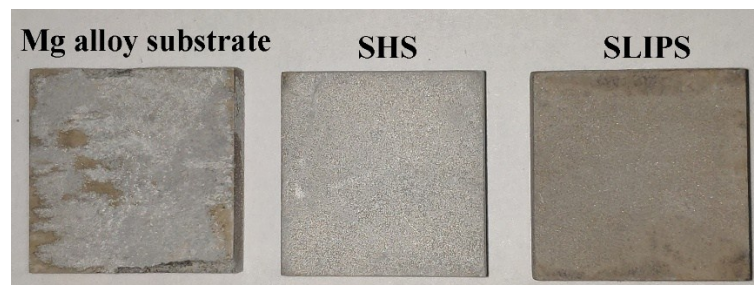


Figure S2. Digital photos of the attachments distribution on Mg alloy substrate, SHS and SLIPS which were immersed into seawater for 7 days after samples taken out and dried in air;



Figure S3. Scratched diagram of SHS and SLIPS for testing the thermally assisted healing property.