

## Supplementary material

### Solar-driven oil spills recover using Carbon dots/loofah sponge

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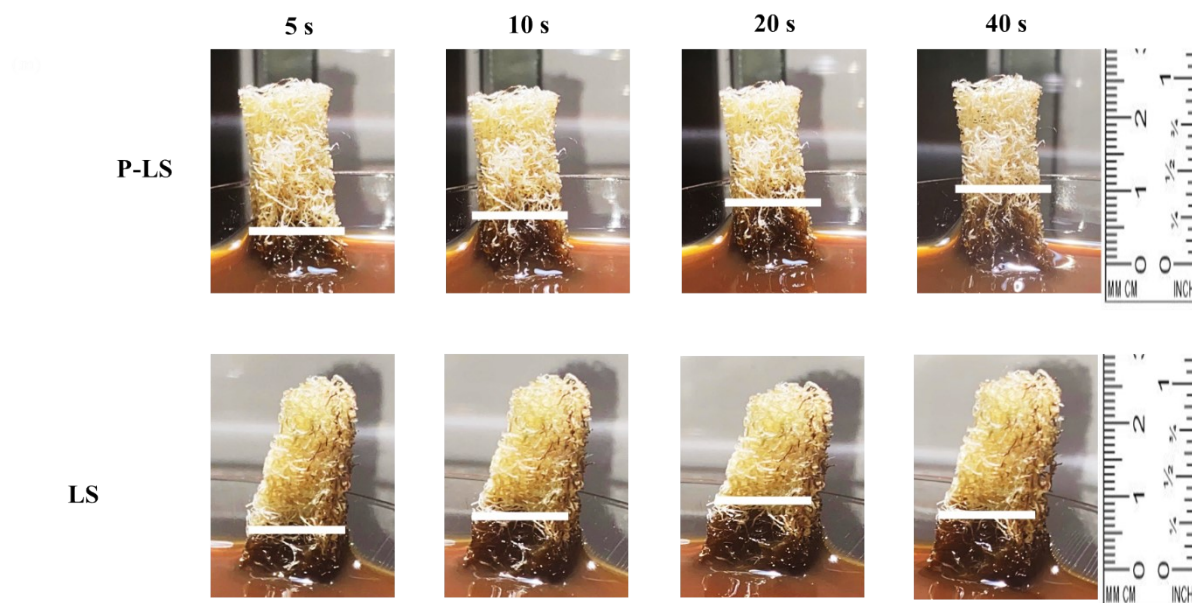
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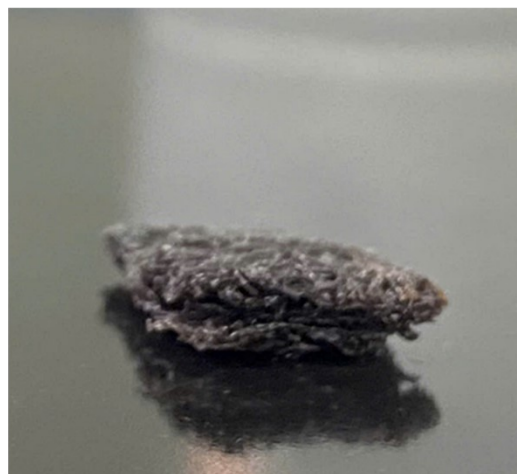


**Fig S1.** Oil absorption rate of LS and P-LS toward vehicle wasted oil.

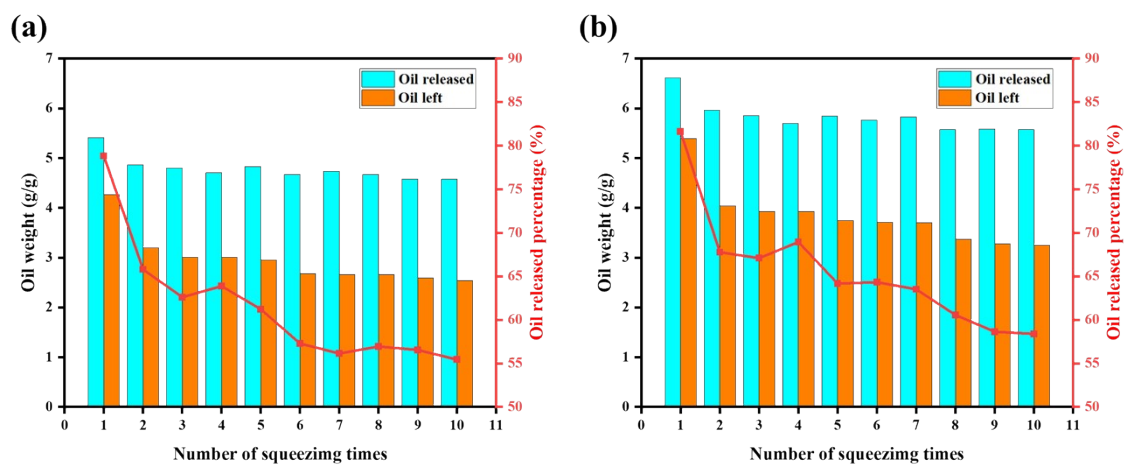
**(a)**



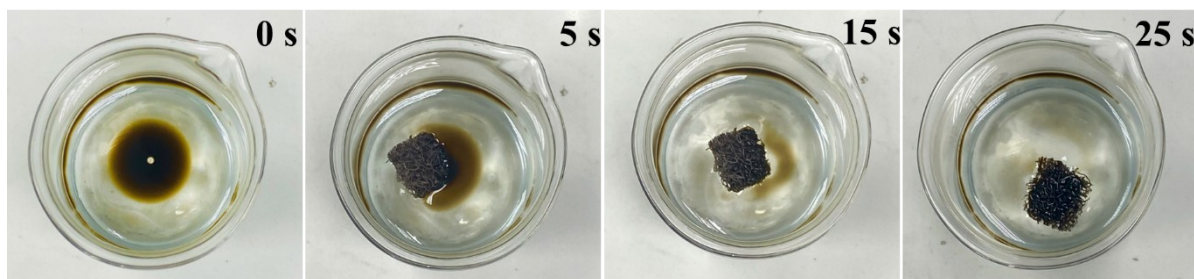
**(b)**



**Fig S2.** Initial structure of P-CLS (a) and after the recovery process by using mechanical methods (b).



**Fig S3.** Oil recovery rate from P-CLS in the irradiation (a) and dark condition (b) by using external mechanical methods.



**Fig S4.** Absorption process of P-CLS