

Efficient solar-to-thermal management on femtosecond laser composite fabrication of hierarchical Janus plates

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This file contains Supplementary Experimental Section, Figures S1-S8.

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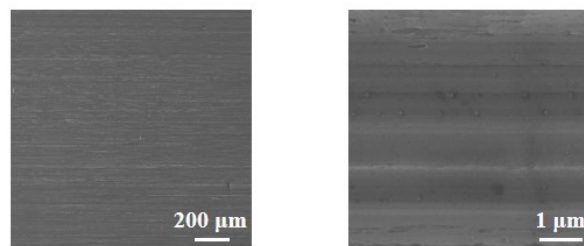


Fig. S1 SEM images of pristine stainless steel surfaces at different magnifications.

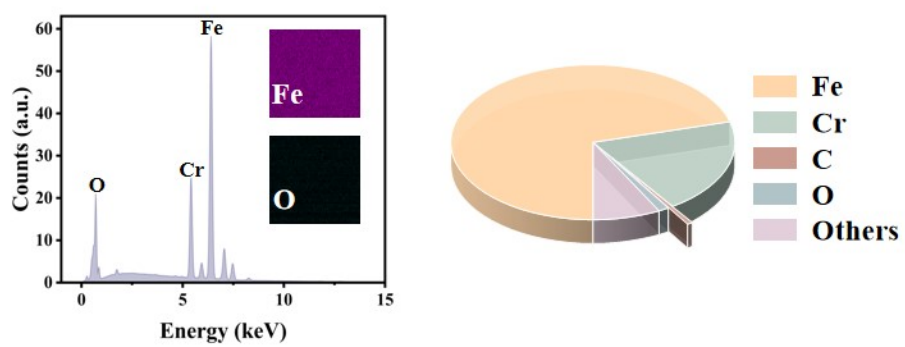


Fig. S2 EDS images of pristine stainless steel.

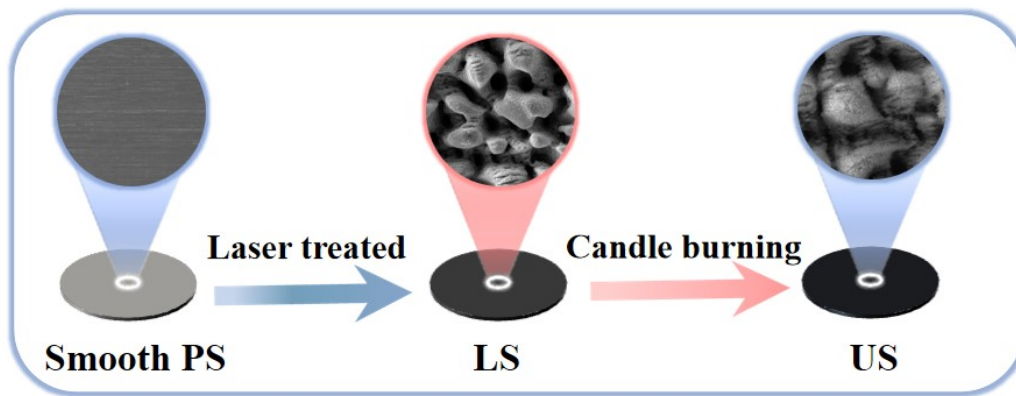


Fig. S3 The change in the microstructure of UL during the preparation process.

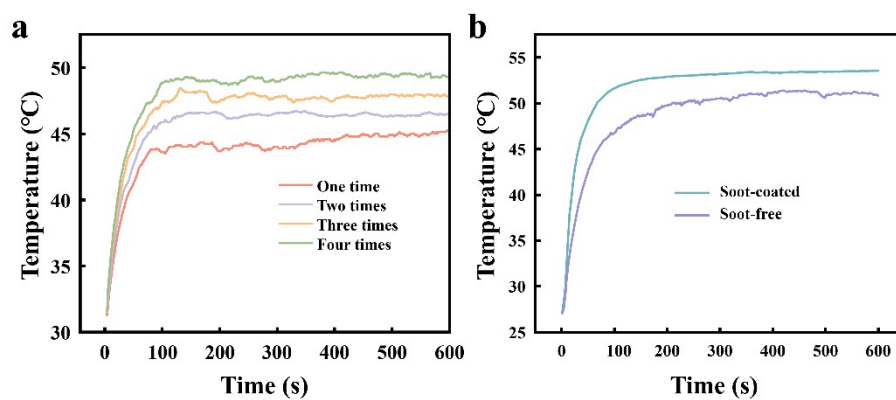


Fig. S4 Effects of laser passes and soot coating on photothermal performance.

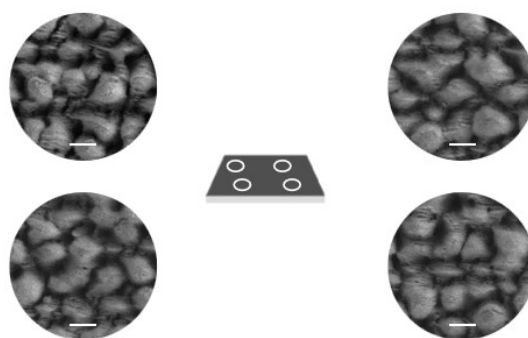


Fig. S5 SEM images of upper surface at four different locations. Scale bars equal to 10 μm in the normal areas.

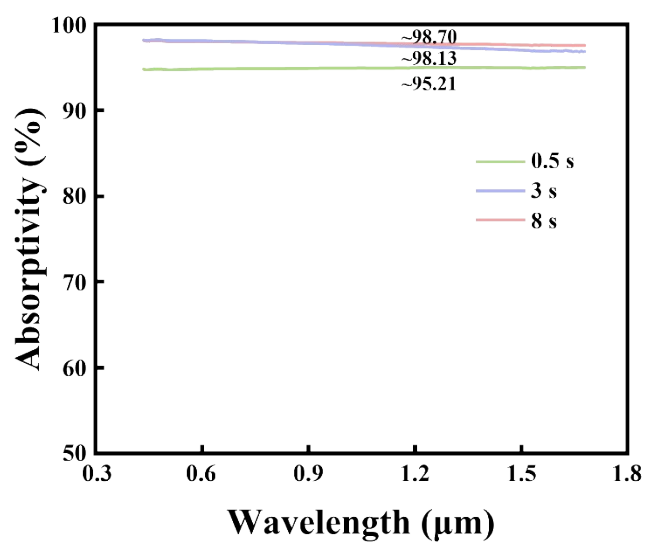


Fig. S6 The effect of soot concentration on surface absorptivity.

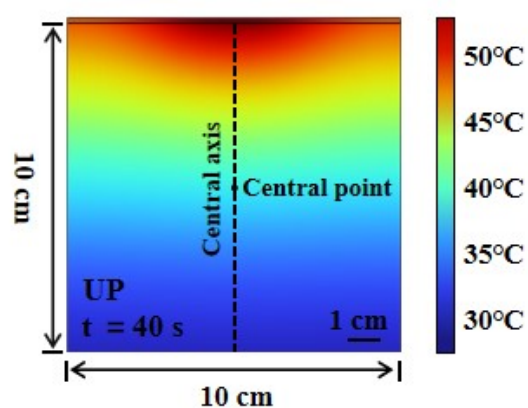


Fig. S7 Temperature cross-section of the UP box simulated by COMSOL simulation under 1.5 sun.

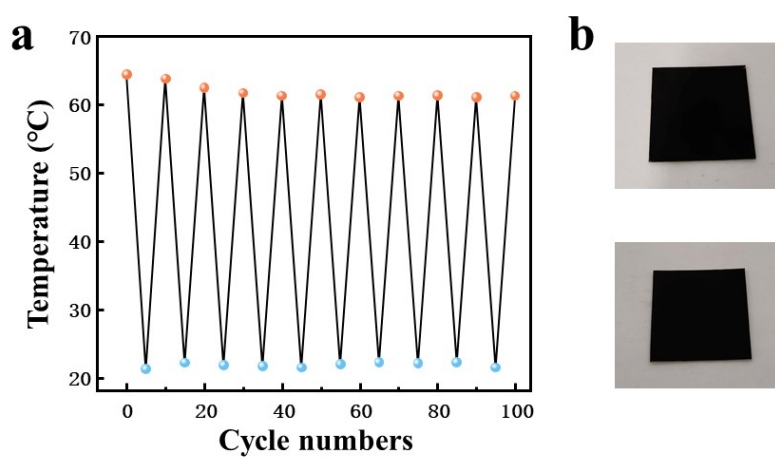


Fig. S8 (a) The photothermal performance of US surface under 1.5 sun illumination during being rubbed 100 times with a brush. (b) Optical images of US before and after being rubbed 100 times.