

## Supporting information

### **Fabrication of solar and electrically adjustable large area smart windows for indoor light and heat modulations**

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# A. K. Singh, S. Kiruthika contributed equally to this work.

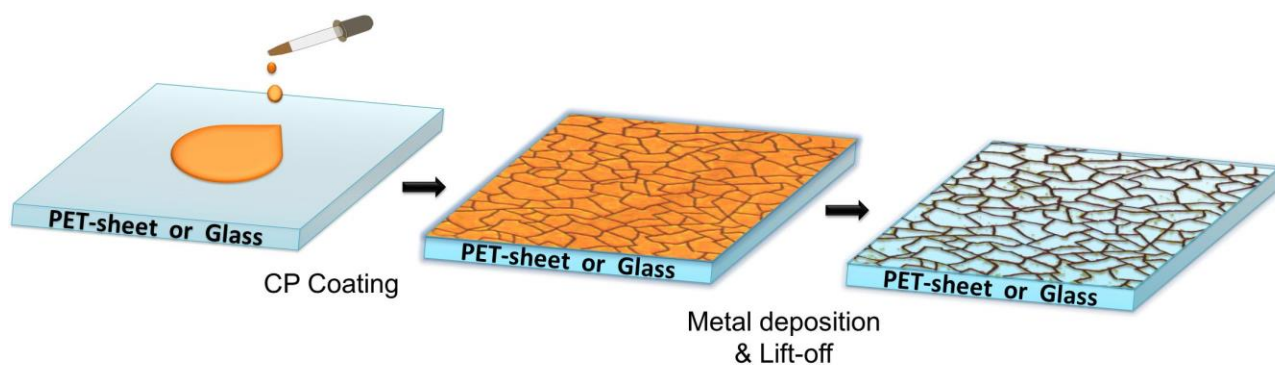
⊥ On lien from JNCASR, Bangalore, India.

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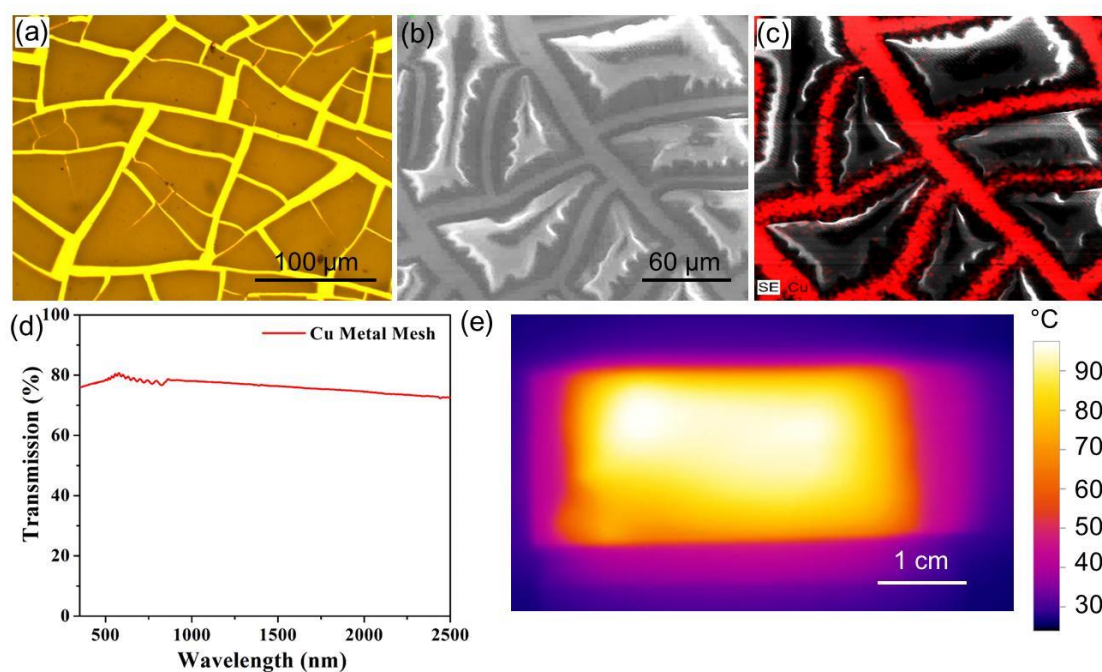
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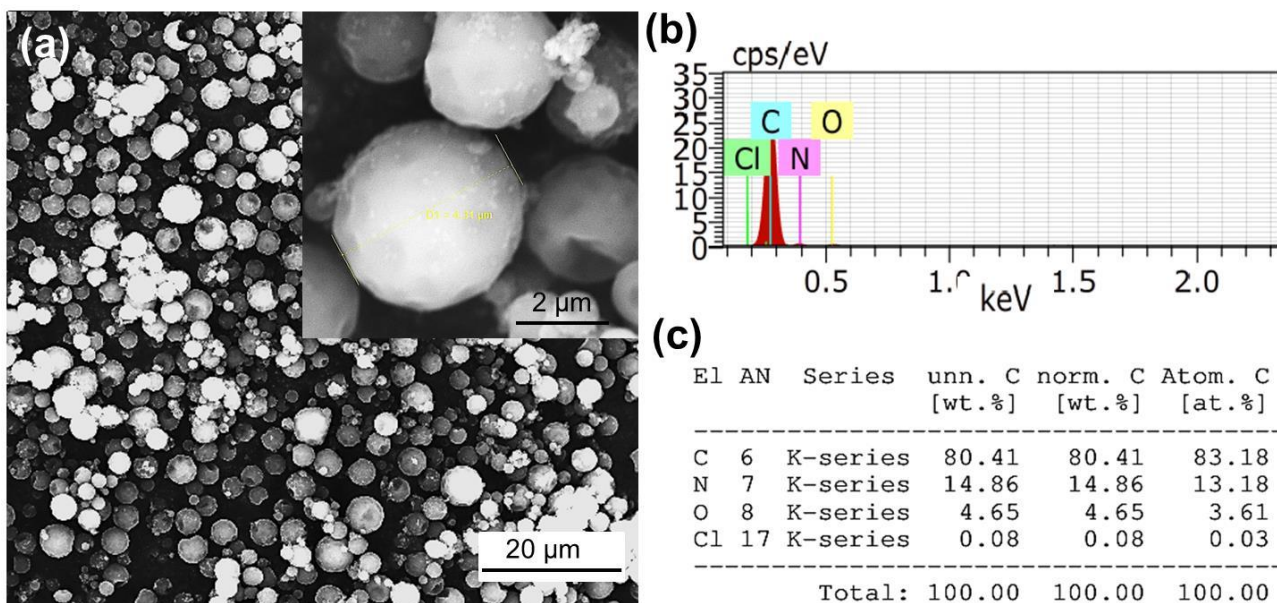
\* E-mail: [guk@cens.res.in](mailto:guk@cens.res.in)



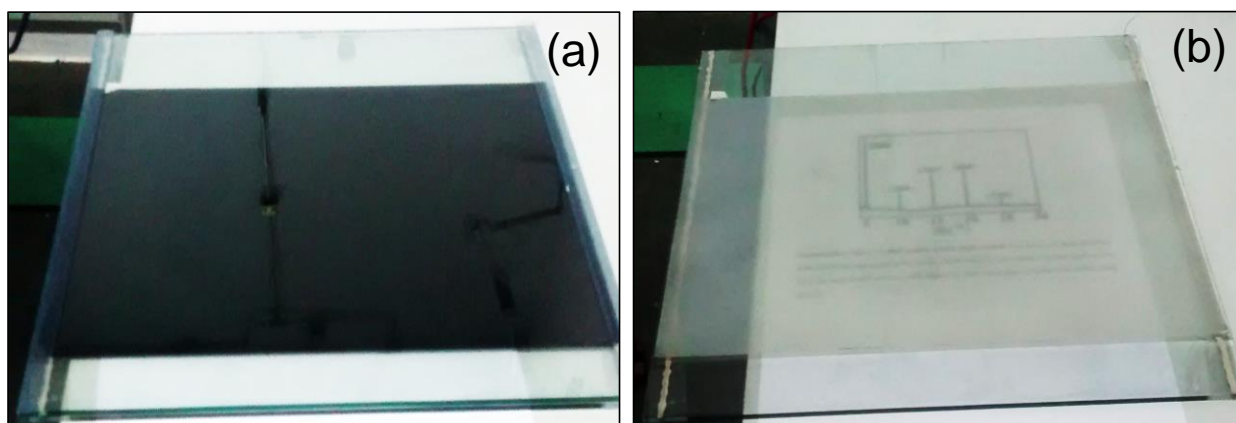
**Fig.S1** Schematic illustration for the fabrication of metal mesh network.



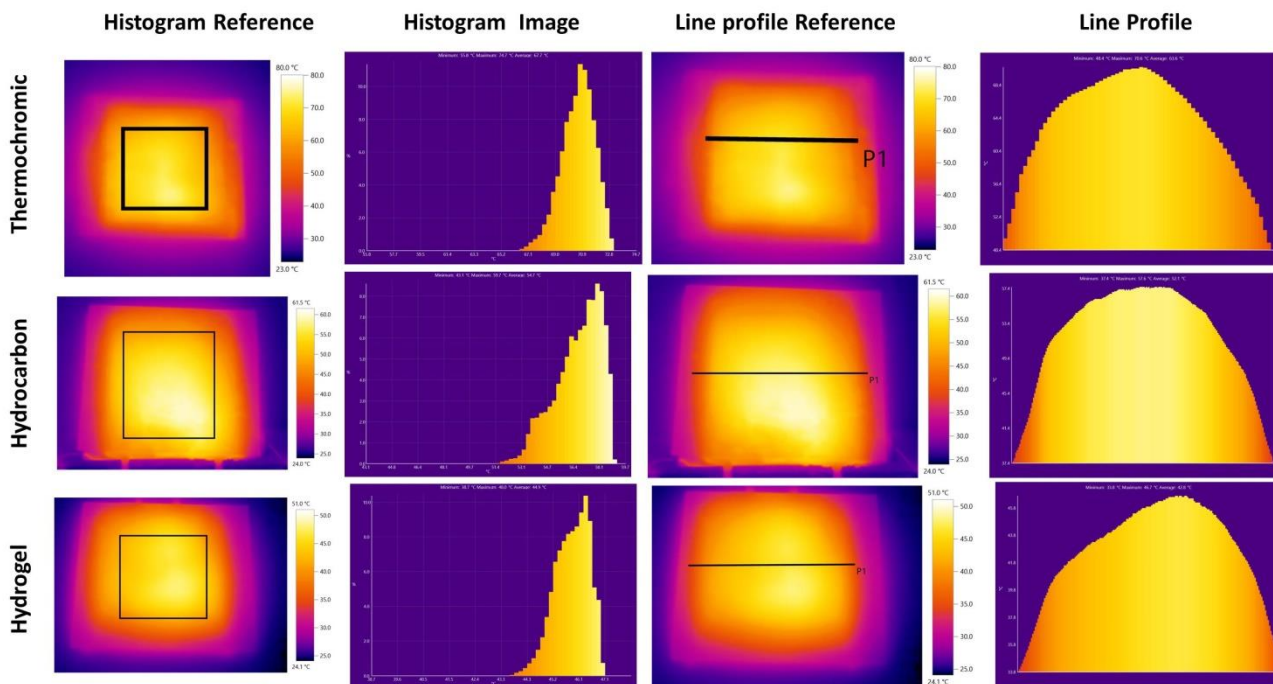
**Fig.S2** (a) Optical microscopy and (b) SEM images of Cu mesh on PET substrate. (c) EDS mapping of Cu clearly indicates that Cu is present only in the network structure with no residues in between. (d) Transmittance spectrum and (e) IR image of the Cu mesh.



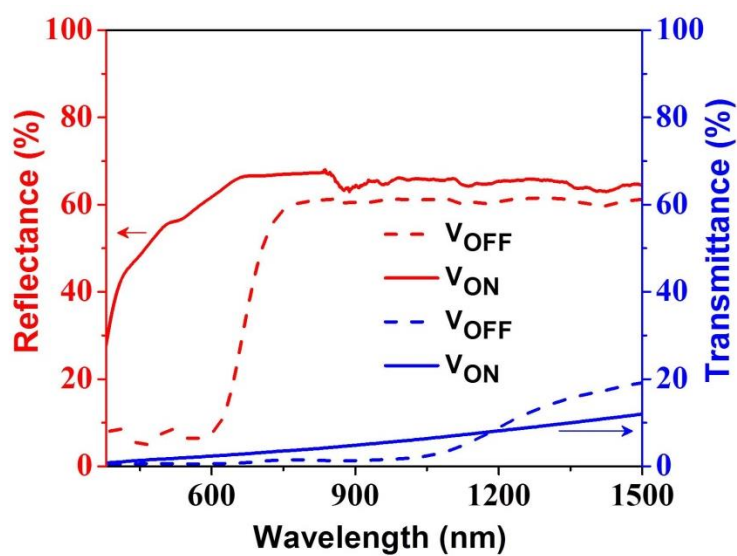
**Fig.S3** (a) SEM image (b) EDS spectrum and (c) atomic composition of thermochromic pigment.



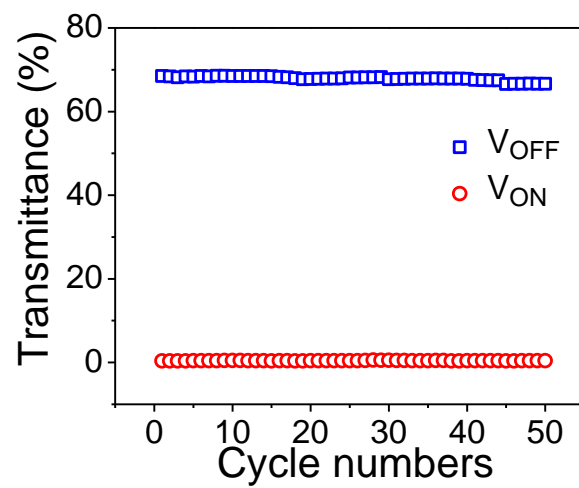
**Fig.S4** Photographs of A4 size thermochromic device fabricated with Cu mesh in its  $V_{\text{OFF}}$  (a) and  $V_{\text{ON}}$  states (b).



**Fig.S5** IR images with its histogram and line profile for thermochromic, hydrocarbon and hydrogel devices.



**Fig.S6** Reflectance and transmittance of thermochromic device in NIR region.



**Fig. S7** Cycle stability of a hydrogel device.