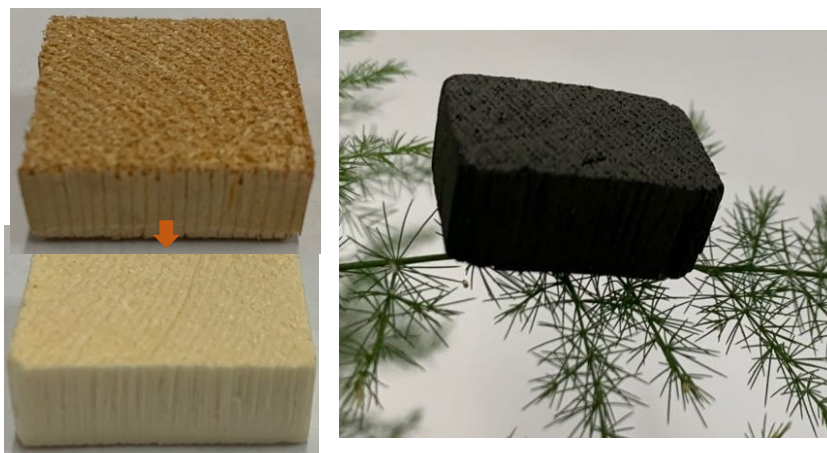
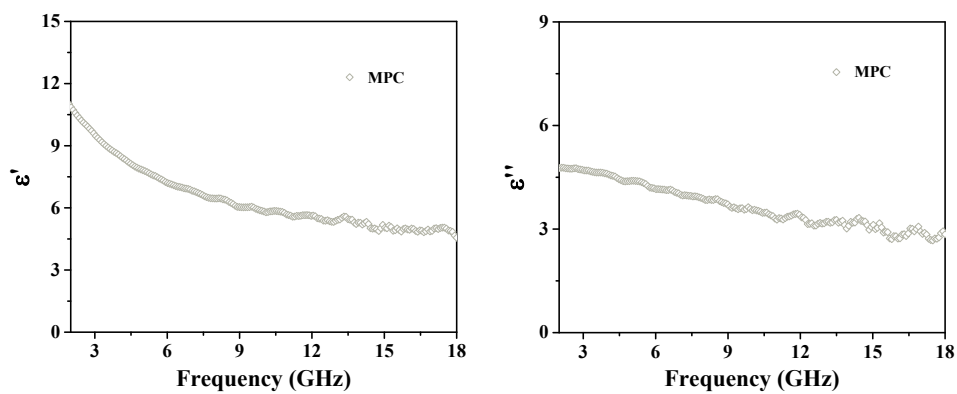


## Supporting information

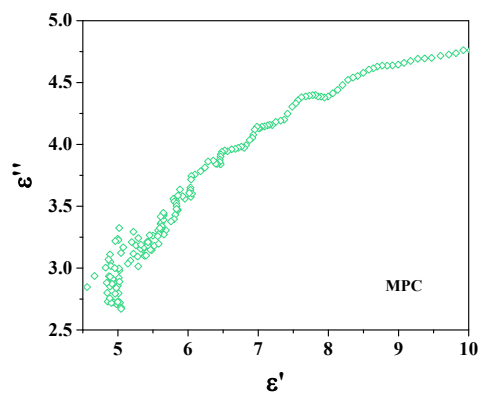
**Fig. S1** The photograph of raw wood, pretreated wood, and MHPC.



**Fig. S2** The plots of real permittivity and imaginary permittivity versus frequency for MPC.



**Fig. S3** The plots of  $\tan\delta_\epsilon$  versus frequency for MPC.



**Fig. S4** The plots of  $\tan\delta_\epsilon$  versus frequency for MPC.

