Electronic Supporting Information for

Integration of Patterned Conductive Carbon Nanotube Thin Film with Insulating Hydrophobic Polymer Carpet into Robust 2D Janus Hybrid Flexible Electronics

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Fig. S1 Photo of ethanol-assisted dispersed CNTs suspensions.

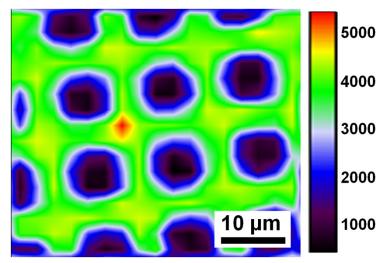


Fig. S2 Raman mapping information of the grid patterns. The color gradations represent the value of I_{G} , which are collected from area of 45×45 μ m.

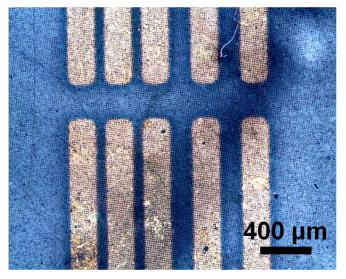


Fig. S3 Optical image of the freestanding 2D Janus thin film transferred onto the patterned Au electrodes surface.

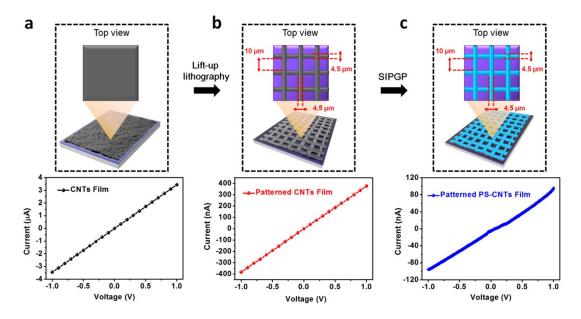


Fig. S4 Current-Voltage curves. a) The as-prepared LB CNTs film, b) The patterned LB CNTs film, d) Polymer grafted patterned CNTs film.

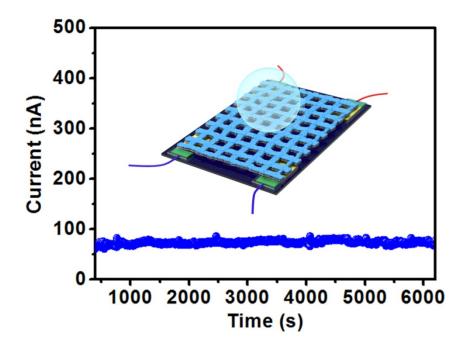


Fig. S5 Current vs. time curve of the Janus hybrid exposed to water in the long range