

# Fabrication of Piezoelectric Electrospun Termite Nest-like 3D Scaffolds for Tissue Engineering

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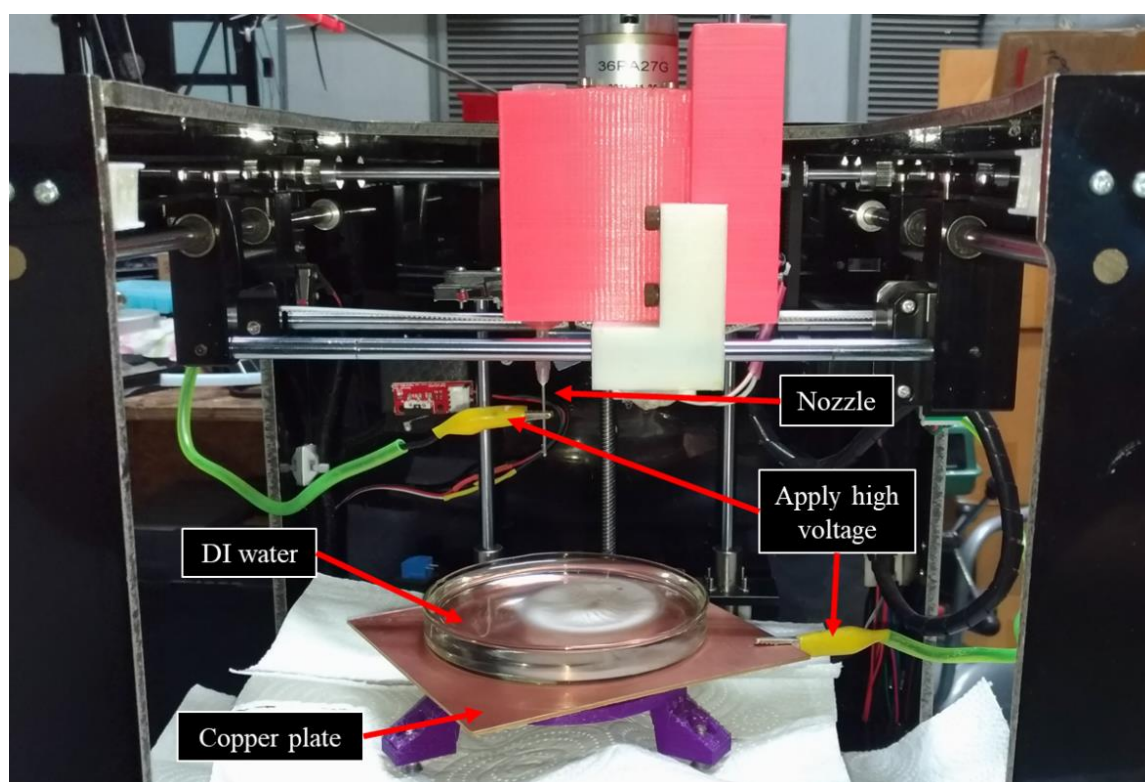
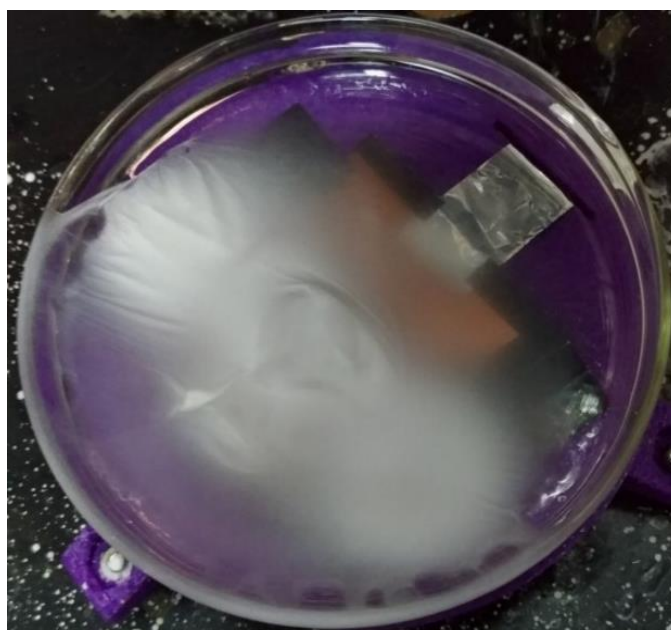


Figure S1. Photograph of the 3D electrospinning setup with a water-collecting bath.

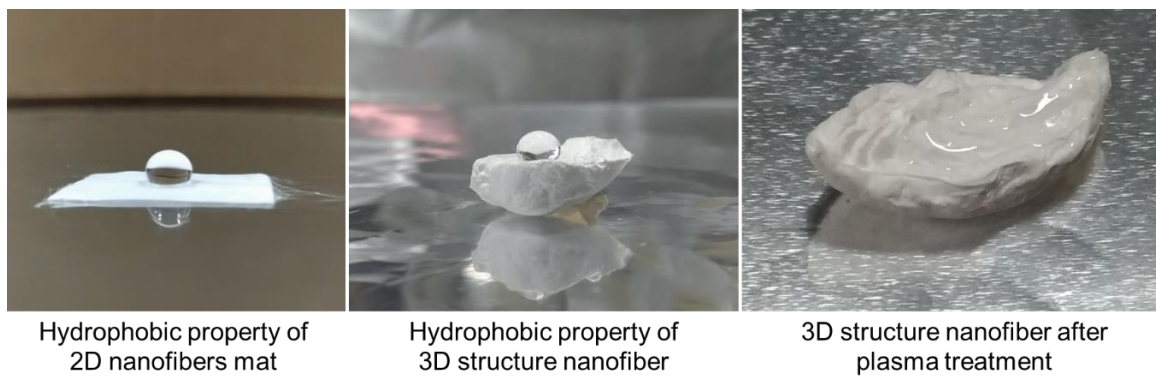
**Table S1.** The production of PVDF-HFP 3D nanofibers structure.

Concentration (wt%)	HV (kV)	Diameter (nm)	Beads	3D structure
10	15.5	$441 \pm 18$	Yes	No
13	12.8	$451 \pm 16$	Yes	No
15	10	$802 \pm 23$	No	Yes
17	9.2	$1256 \pm 43$	No	Yes
20	7.1	$1277 \pm 32$	No	No

**Figure S2.** The fibers cover on the water surface when distance between the tip of the needle and the water surface was changed from 5 to 10 cm.



**Figure S3.** The termite nest-like 3D scaffold can be reproduced.

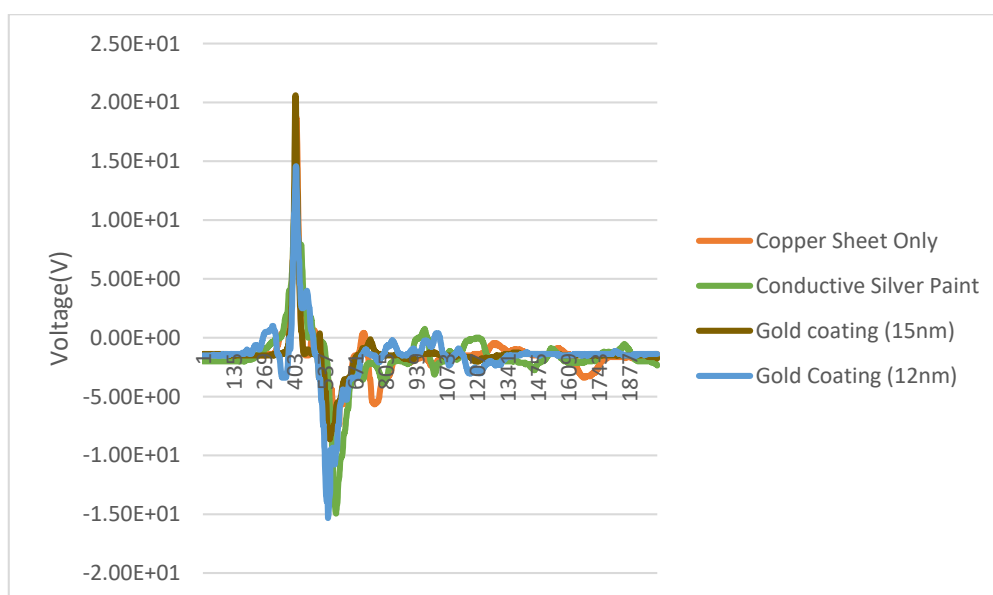


Hydrophobic property of  
2D nanofibers mat

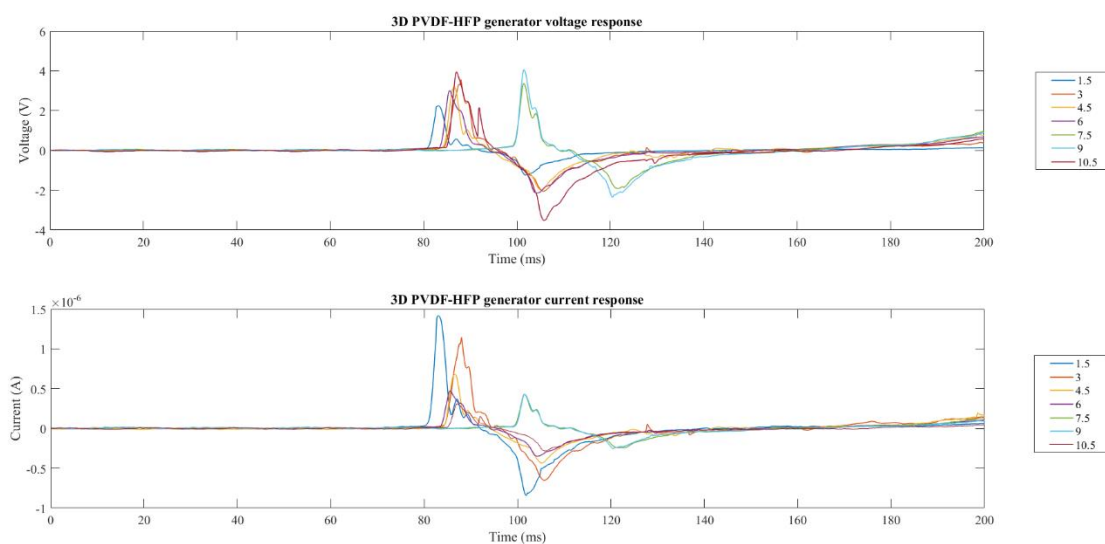
Hydrophobic property of  
3D structure nanofiber

3D structure nanofiber after  
plasma treatment

**Figure S4.** The water drops on the PVDF-HFP 2D and 3D nanofiber.



**Figure S5.** Open voltage response as a function of electrode attachment to the piezoelectric fibers.



**Figure S6.** Voltage and current response of the 3D PVDF-HFP generator when a 100 g weight was dropped on its surface from a height of 5 cm and for different load conditions. The resistive loads used ranged from of 1.5 MΩ to 9 MΩ, in 1.5 MΩ increments.