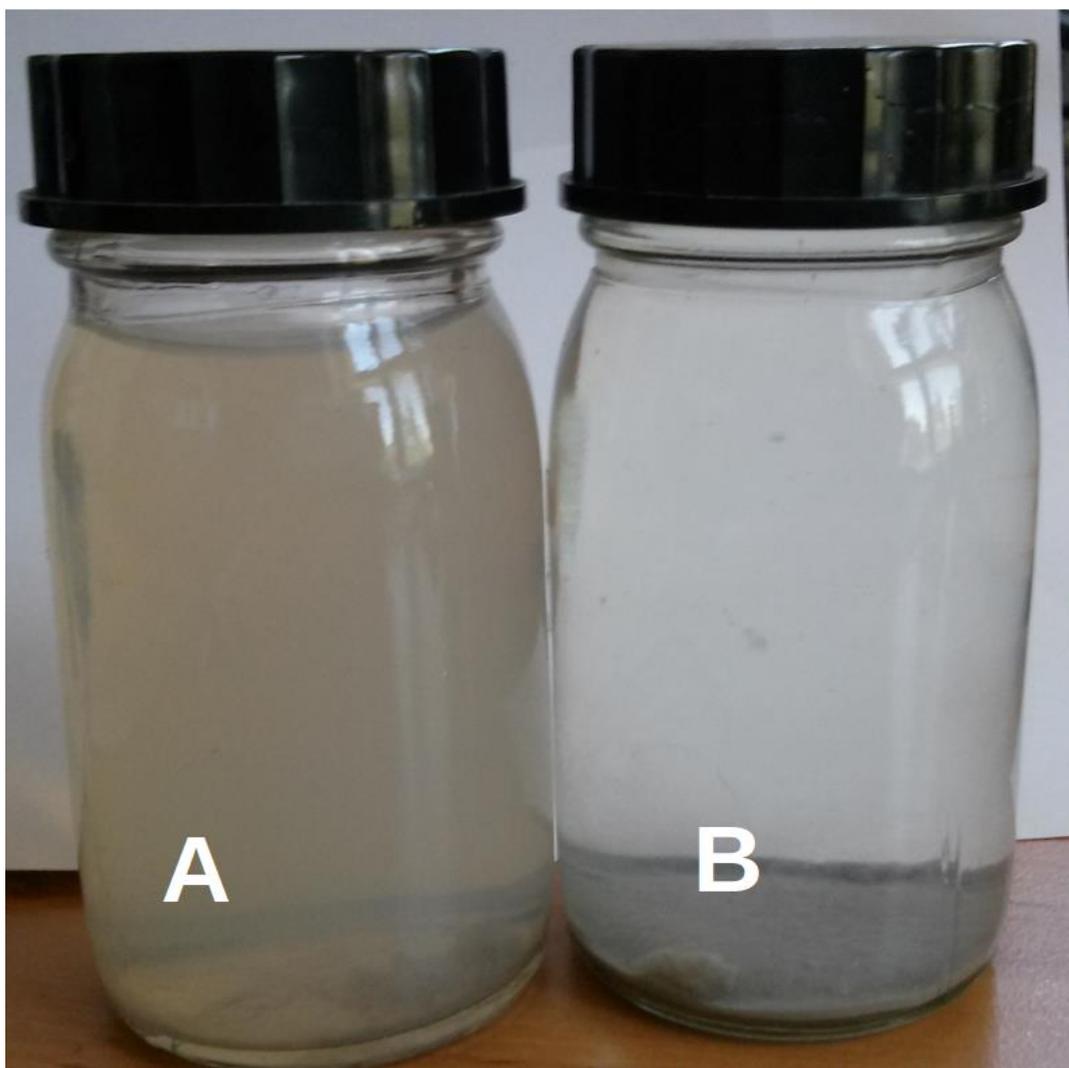
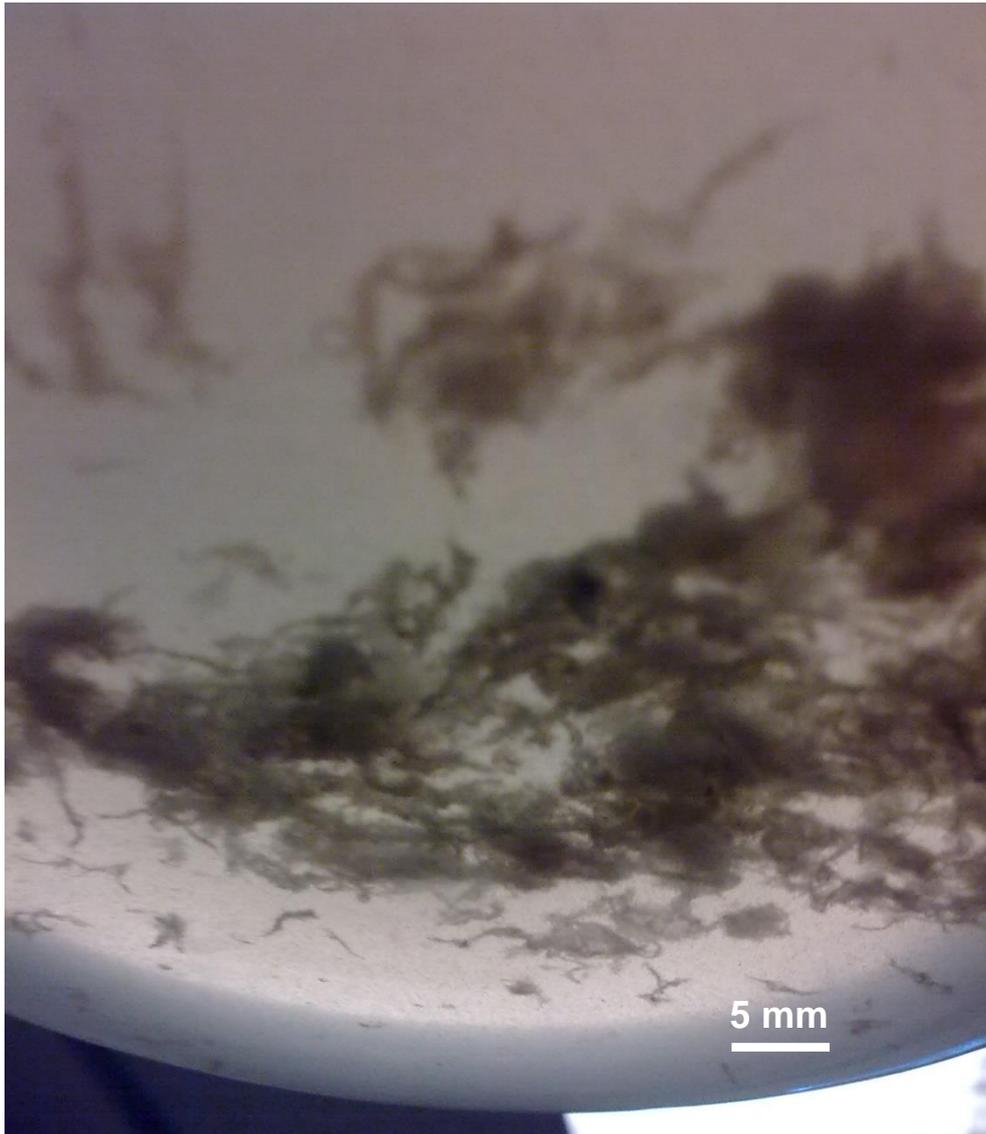


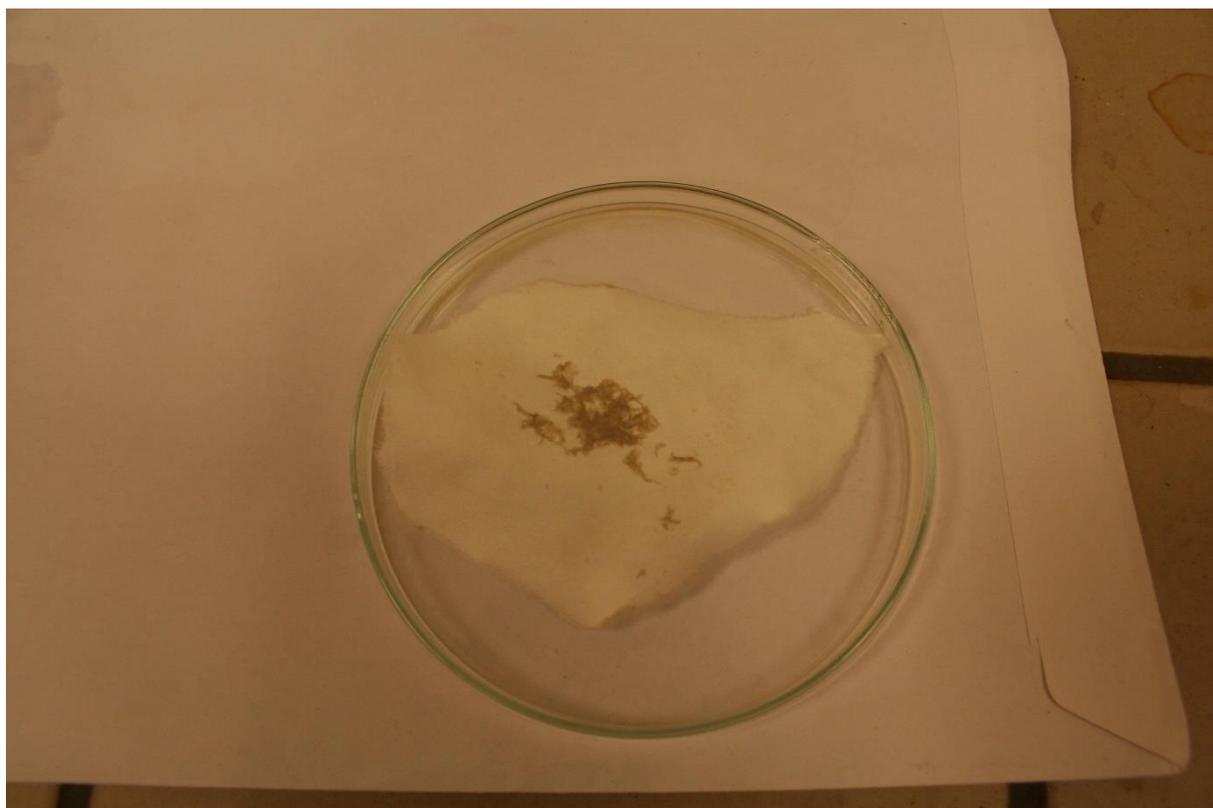
Electronic Supplementary Information



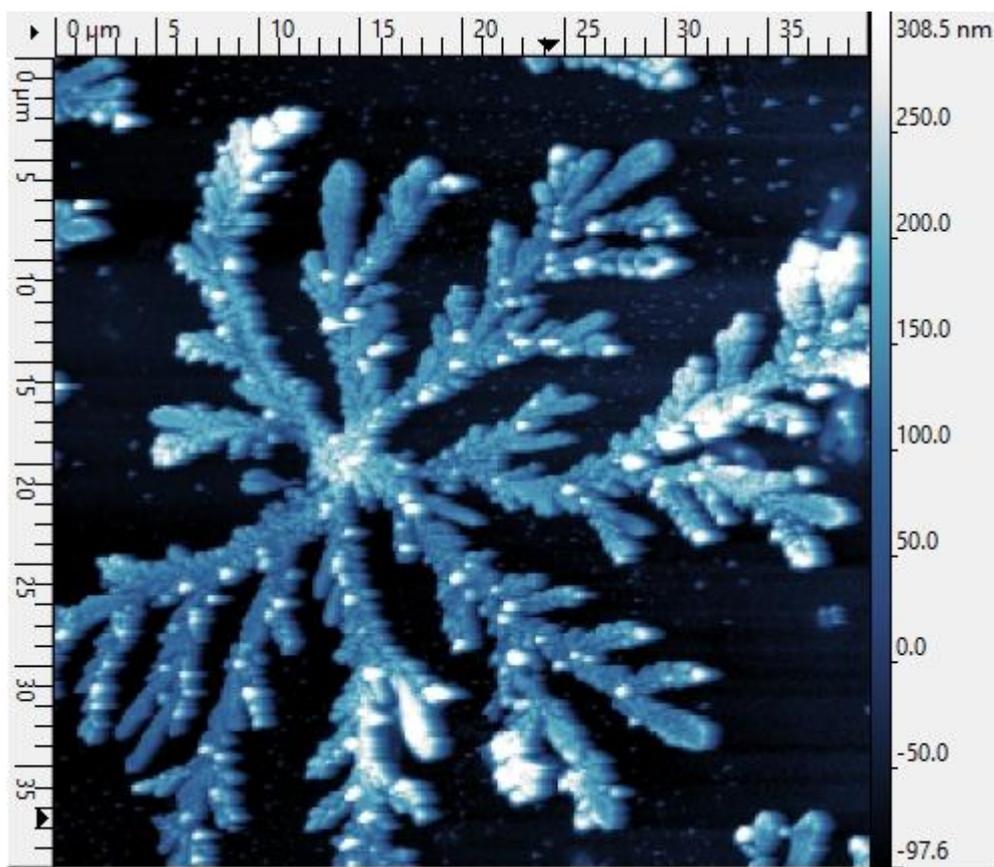
**Fig. S1.** 100 ml storage bottles with original DNPs concentration of  $0.37 \text{ g.l}^{-1}$  for both solutions A and B treated for 50 min in underwater discharge. The Photo taken after 2 months from the treatment.



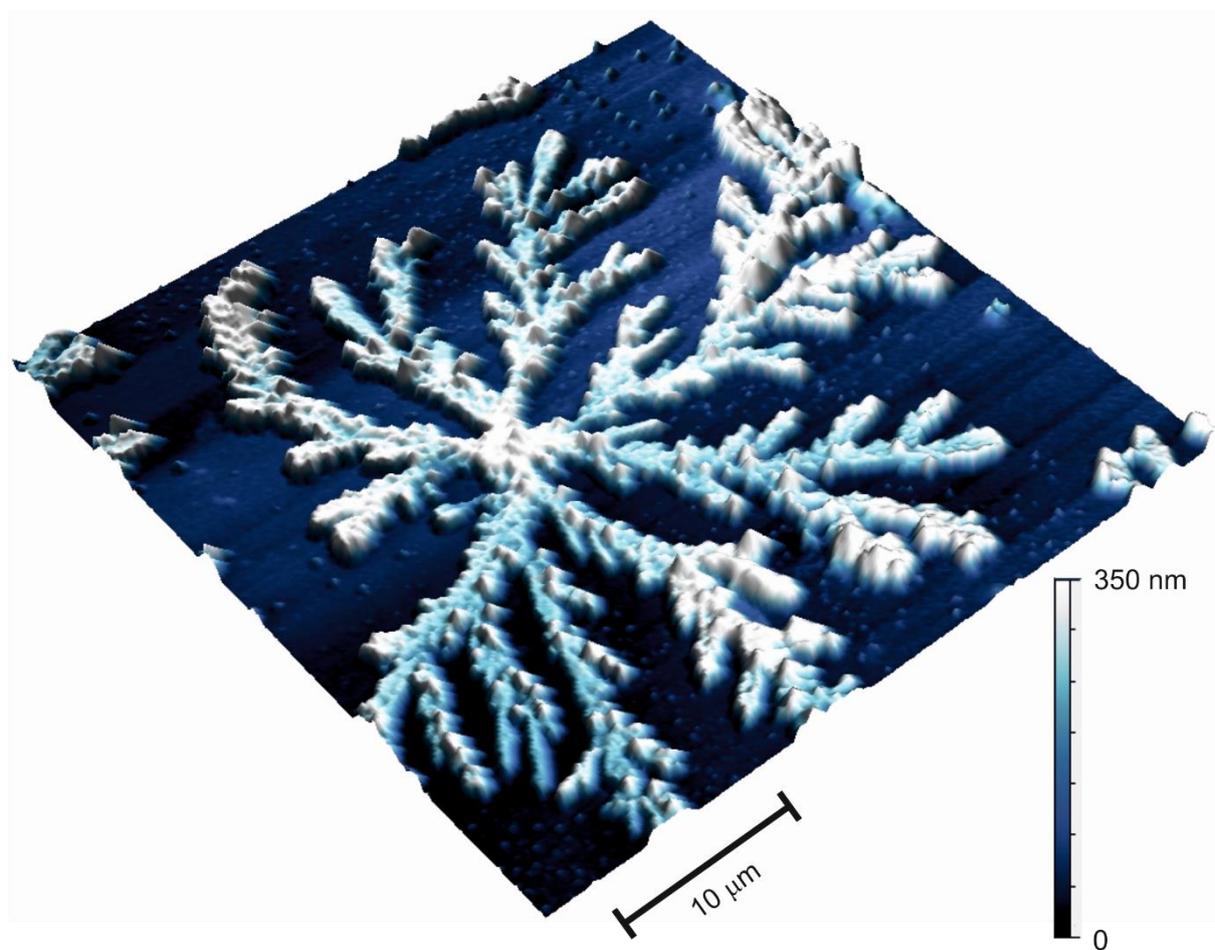
**Fig. S2.** DNPs filaments in water. 3 times decanted solution A after 50-min discharge treatment.



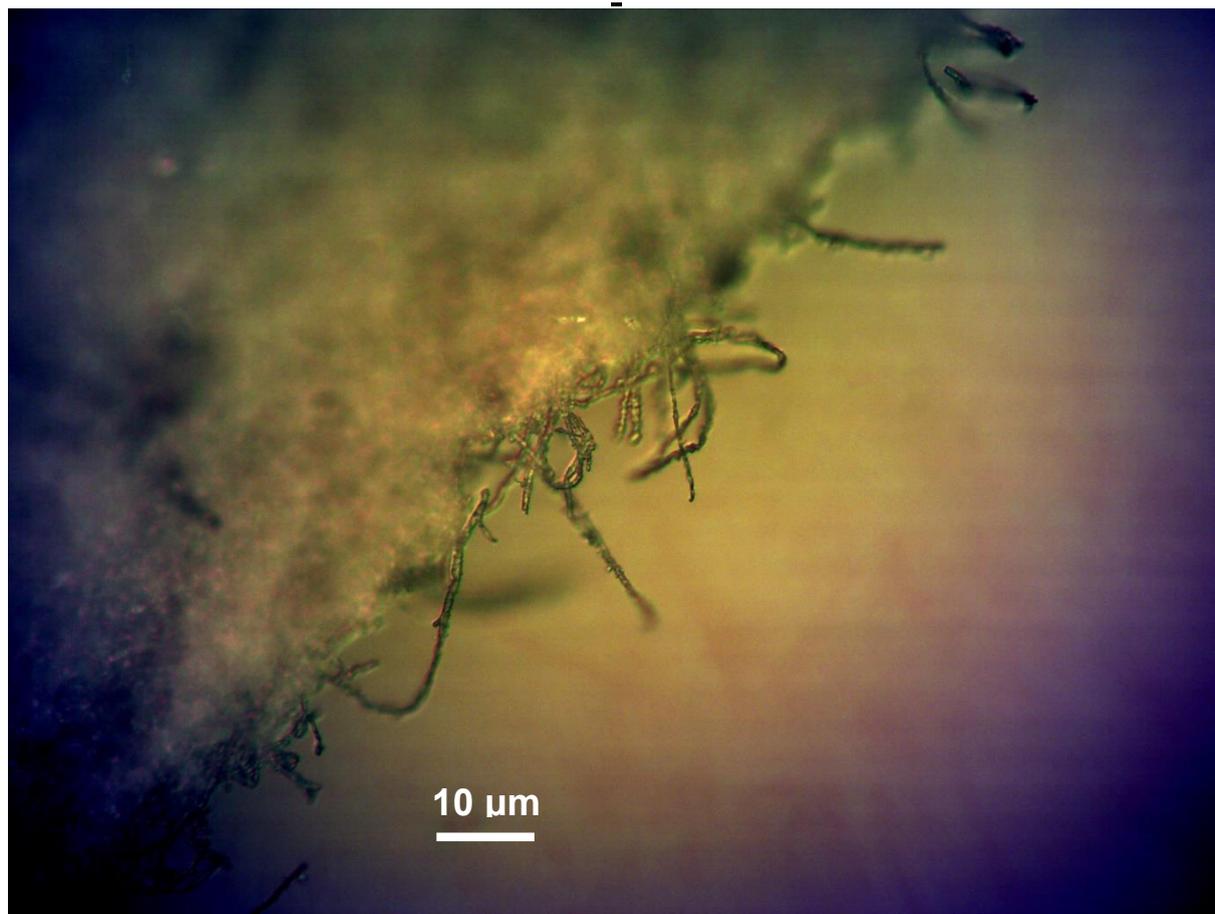
**Fig. S3.** Dried DNPs filaments on 5-inch Petri dish. From the 50-min treated solution A.



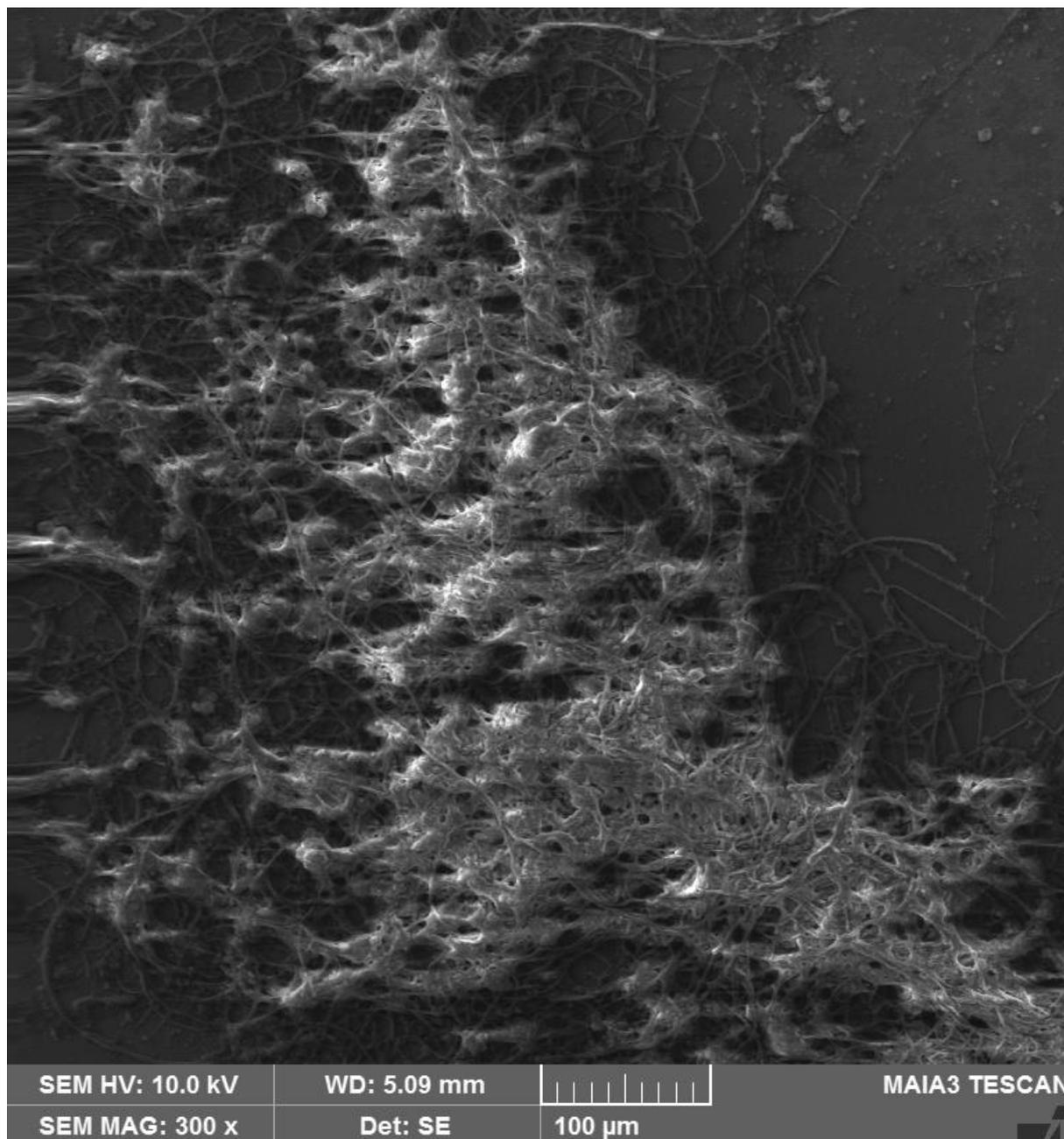
**Fig. S4.** 2D AFM image of a dendrite-like structure consisting from DNPs from the solution B treated for 35 min.



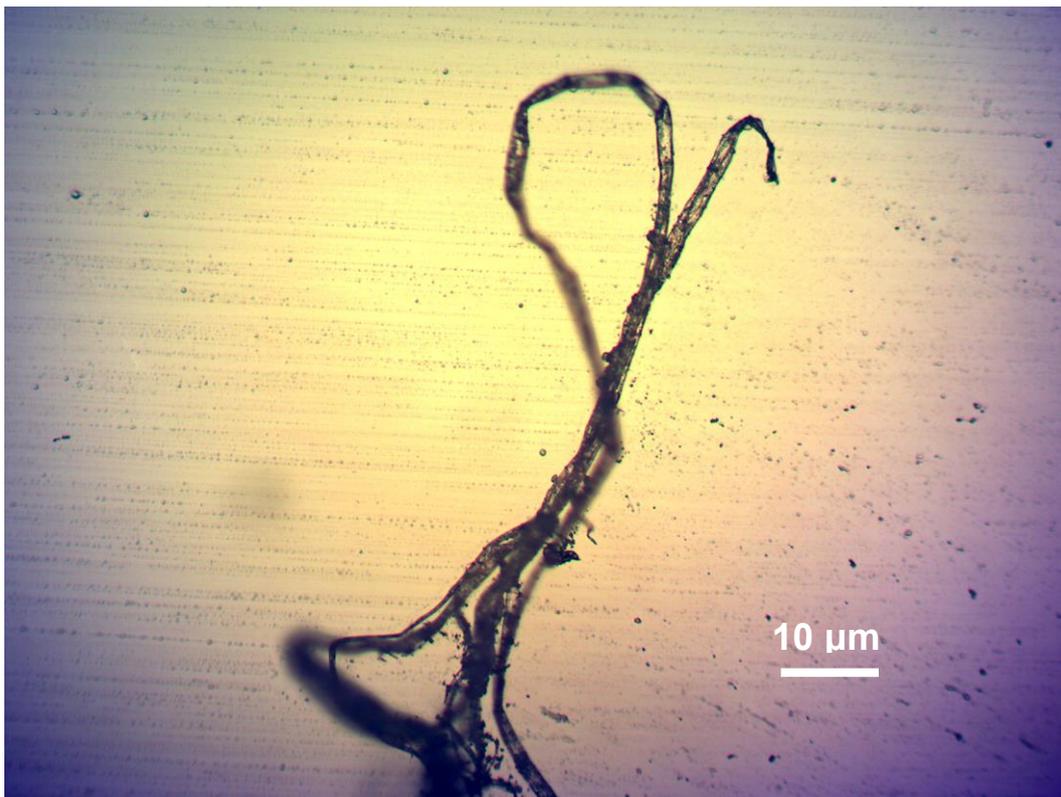
**Fig. S5.** AFM-reconstructed surface profile of a dendrite-like structure consisting from DNPs from the solution B treated for 35 min.



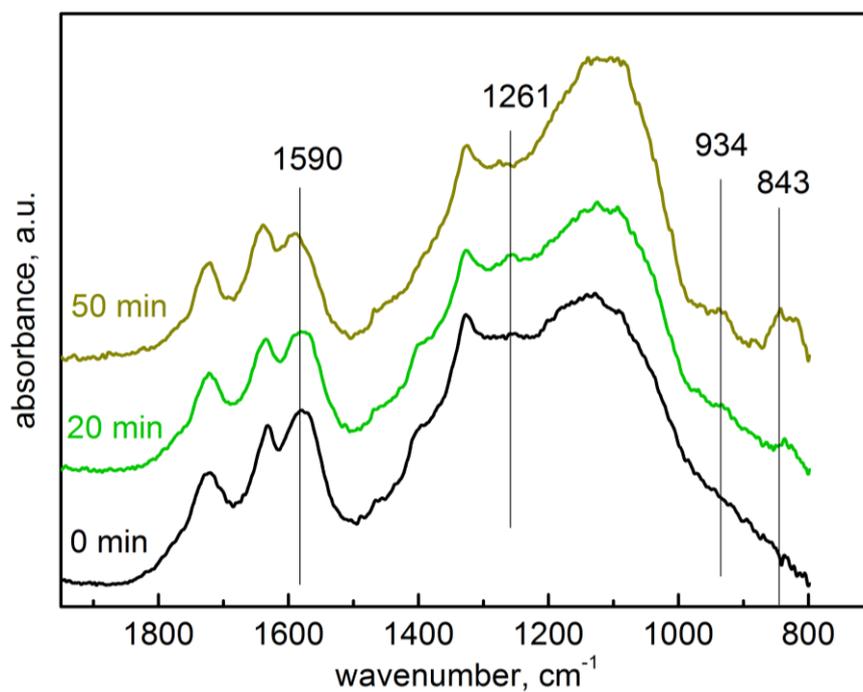
**Fig. S6.** DNPs filaments at the edge of dried large piece of a dense network. From the solution B, 50-min discharge treatment.



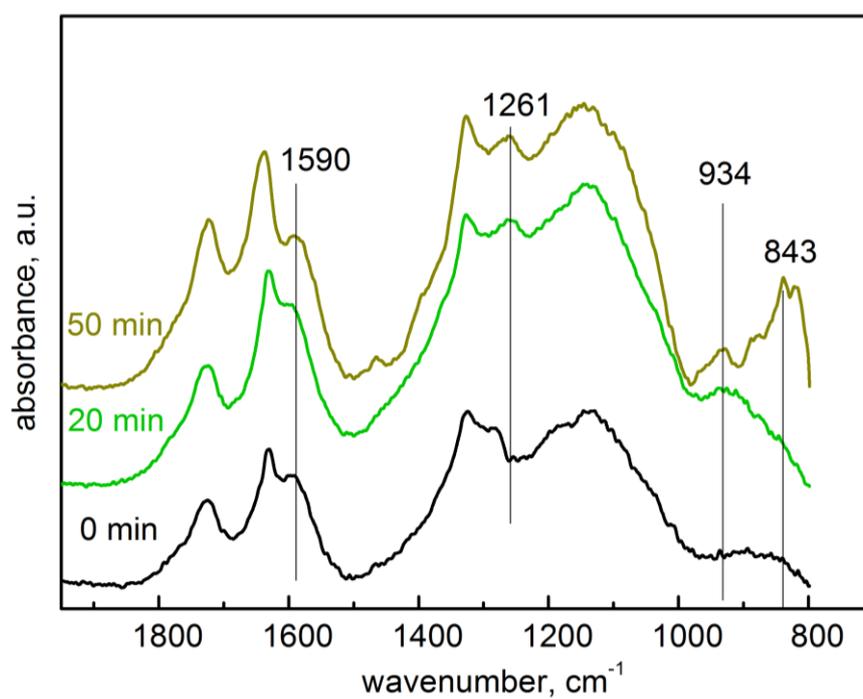
**Fig. S7.** SEM image of the network of DNP filaments. From the solution B, 50-min discharge treatment.



**Fig. S8.** Optical image of folded DNP filament. From the solution B, 35-min treatment.



a)



b)

**Fig. S9.** Detailed FTIR spectra in the fingerprint region for DNPs of the solutions A (a) and B (b) treated for 0; 20 and 50 min.

**Table S1.** Percentage of C-X bonds calculated from deconvoluted C 1s XPS peak for untreated solutions in comparison with the reference solution without NaCl.

<b>solution</b>	$sp^2$ ,%	$sp^3$ ,%	C-O,%	C=O,%	$sp^2/sp^3$
A	9	60	27	4	0.15
B	31	40	21	7	0.78
Reference	14	54	25	7	0.26