Electronic Supplementary Material (ESI) for RSC Advances.

High-performance method of carbon nanotubes modification by microwave plasma for thin composite films preparation

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Supplementary information

Table 1s†. Conditions of nitrogen plasma treatment of carbon nanotubes.

Sample name:	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**
Modification method:	Pristine CNTs	N-CNTs modified in standard RF plasma (in chamber)				(p)N-CNTs modified in flow MW plasma					
Plasma conditions:	-	50 W, *t*=**2** min, *f*=13.56 MHz	50 W, *t*=**5** min, *f*=13.56 MHz	50 W, *t*=**20** min, *f*=13.56 MHz	50 W, *t*=**60** min, *f*=13.56 MHz	150 W	150 W	250 W	250 W	1000 W	1000 W
Dispersed in:	water	water	water	water	water	water	0.1 M PSSNa in water	water	0.1 M PSSNa in water	water	0.1 M PSSNa in water

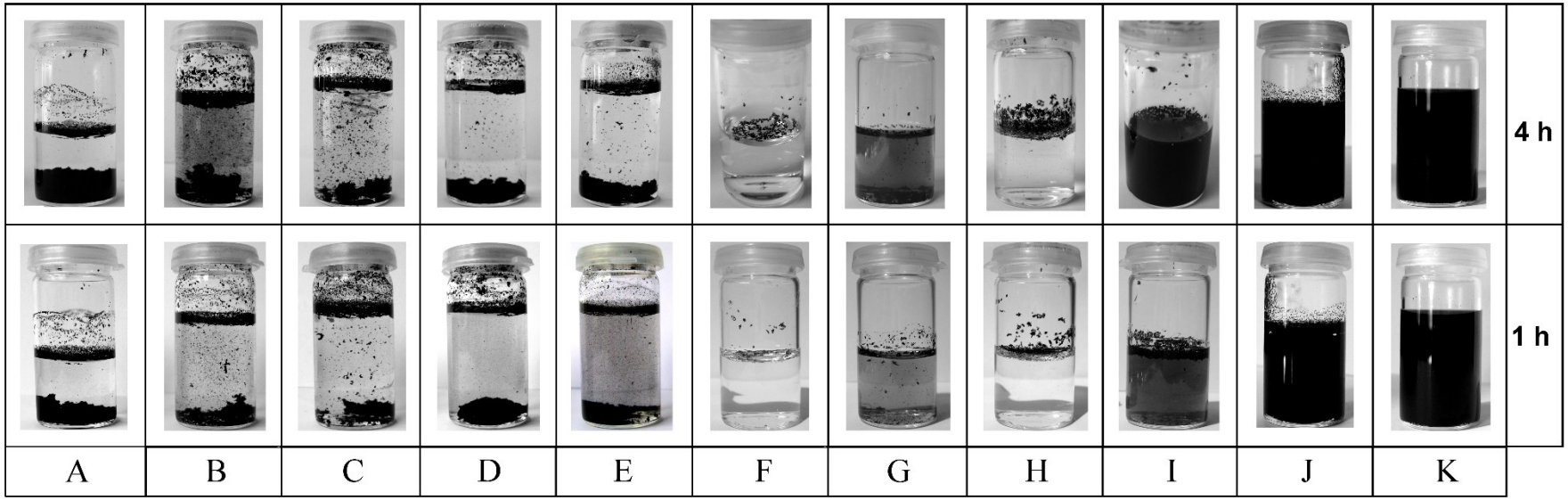

Fig. 1s†. Aqueous suspensions of pristine and modified carbon nanotubes after 1 h and 4 h of sonication, respectively. Samples' names A-K according to Table 1s†.