

Highly hydrophilic water-insoluble nanofiber composite as an efficient and easily-handleable adsorbent for a rapid adsorption of cesium from radioactive wastewater

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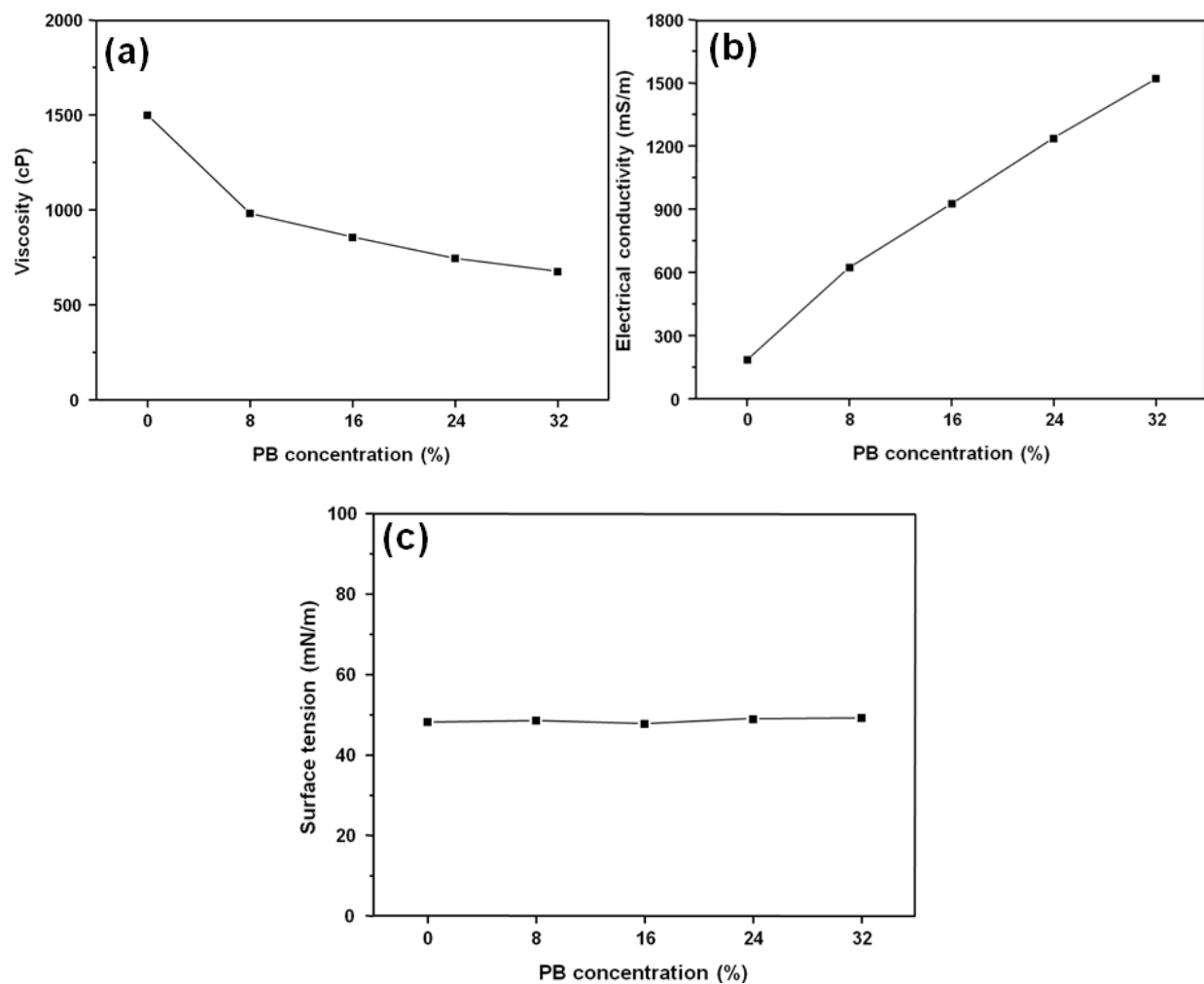


Figure S1. (a) Viscosity, (b) electrical conductivity and (c) surface tension of the PVA solution at different concentrations of PBNPs.

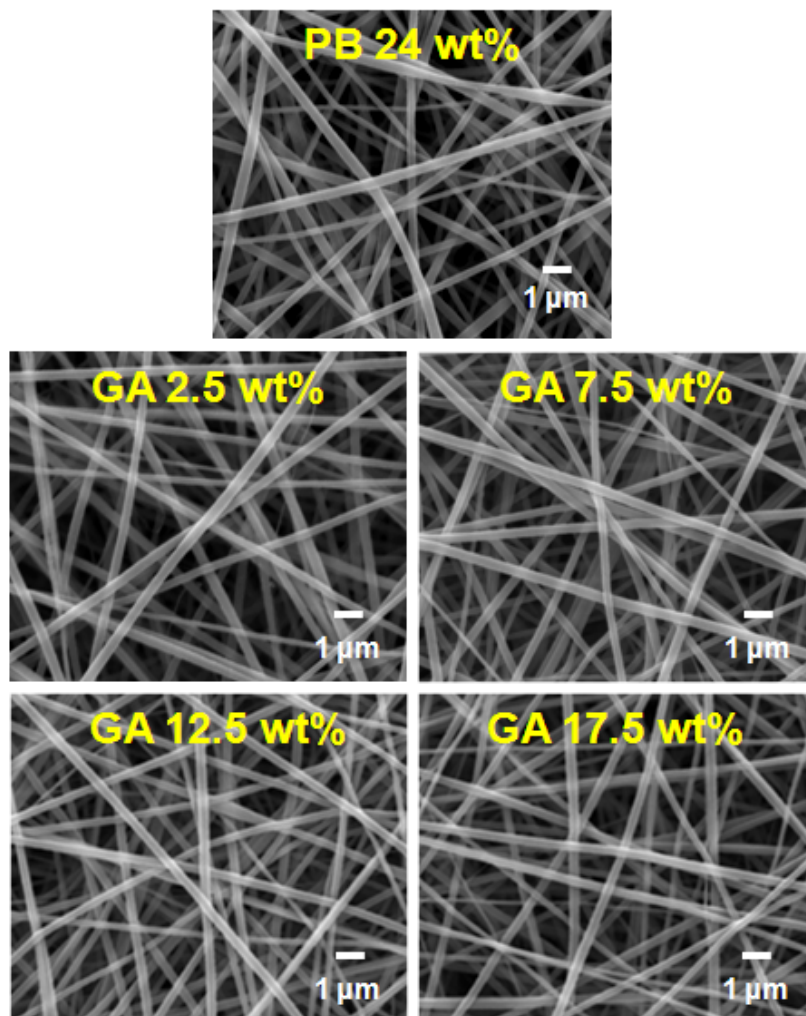


Figure S2. SEM images of *c*-PBNPs/PVA composite nanofibers at different concentrations of GA.

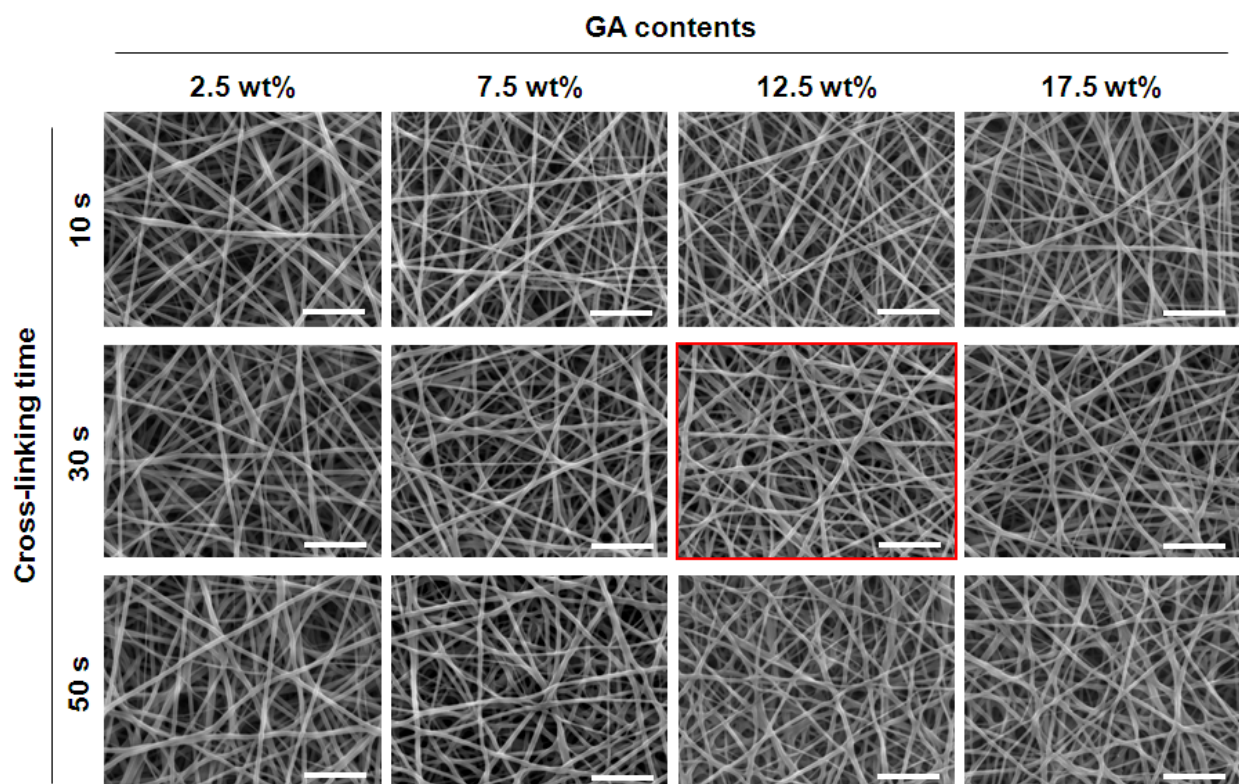


Figure S3. SEM images of *c*-PBNPs/PVA composite nanofibers with different concentrations of GA at different exposure times.

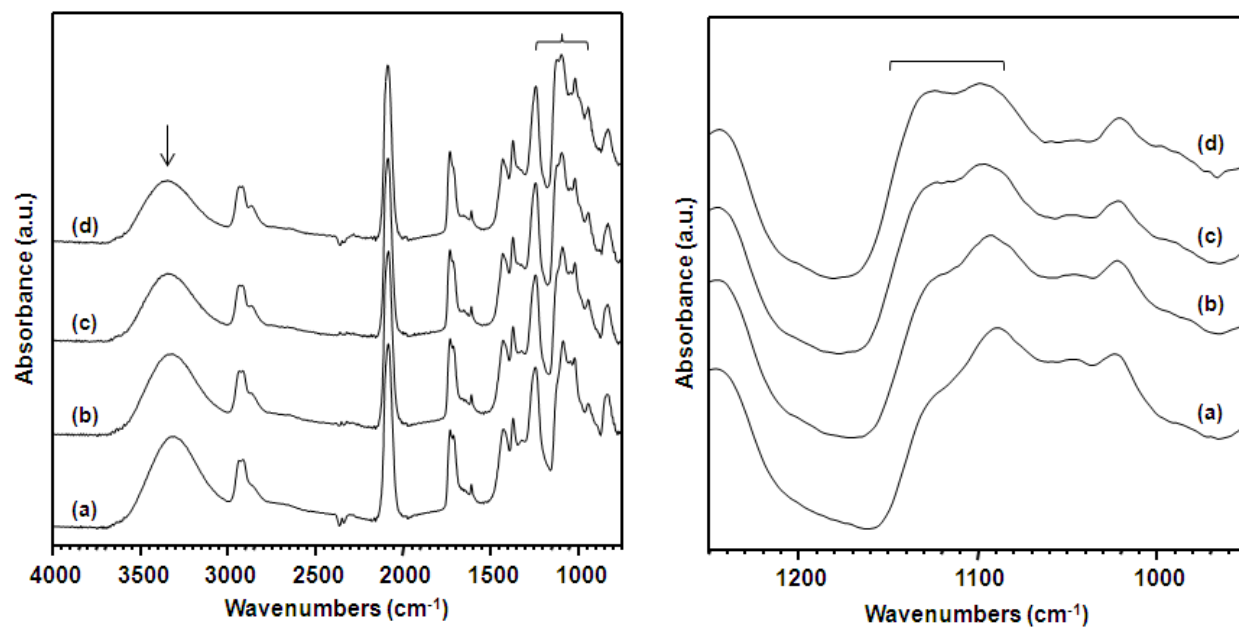


Figure S4. FT-IR spectra of *c*-PBNPs/PVA composite nanofibers with different concentrations of GA at the exposure time of 30 s, (a) 2.5 wt%, (b) 7.5 wt%, (c) 12.5 wt% and (d) 17.5 wt%.

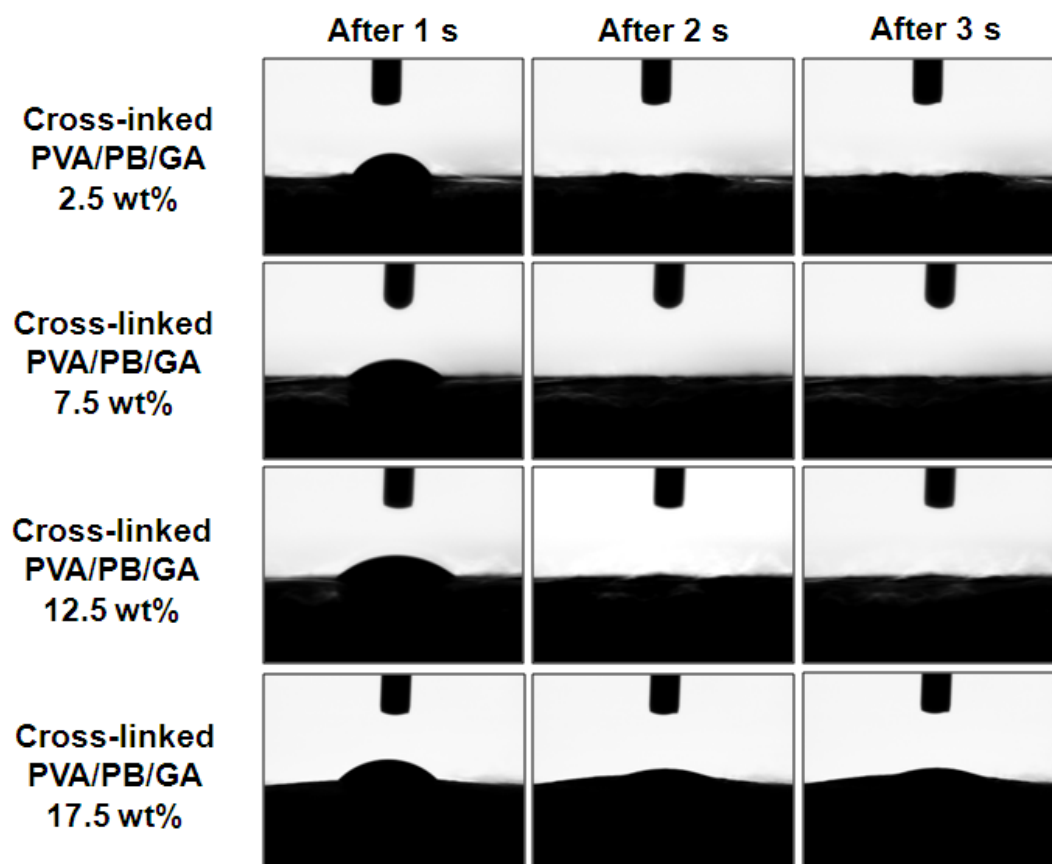


Figure S5. Pictures showing the water contact angles of *c*-PBNPs/PVA composite nanofibers with different concentrations of GA at different times.

Table S1. Fe dissolution test with Cs adsorbents

S.No	Weight of PB of <i>c</i> -PBNPs/PVA composite nanofibers (mg) by ICP-MS	Solution amounts (mL)	Temperature (°C)	Concentration of Fe in solution (ppb)	Conversion concentration of Fe (ppb)
1	1.0059	50	25	15.19	1.519
2	1.0033	50	25	17.21	1.721
3	1.0028	50	25	19.34	1.934