

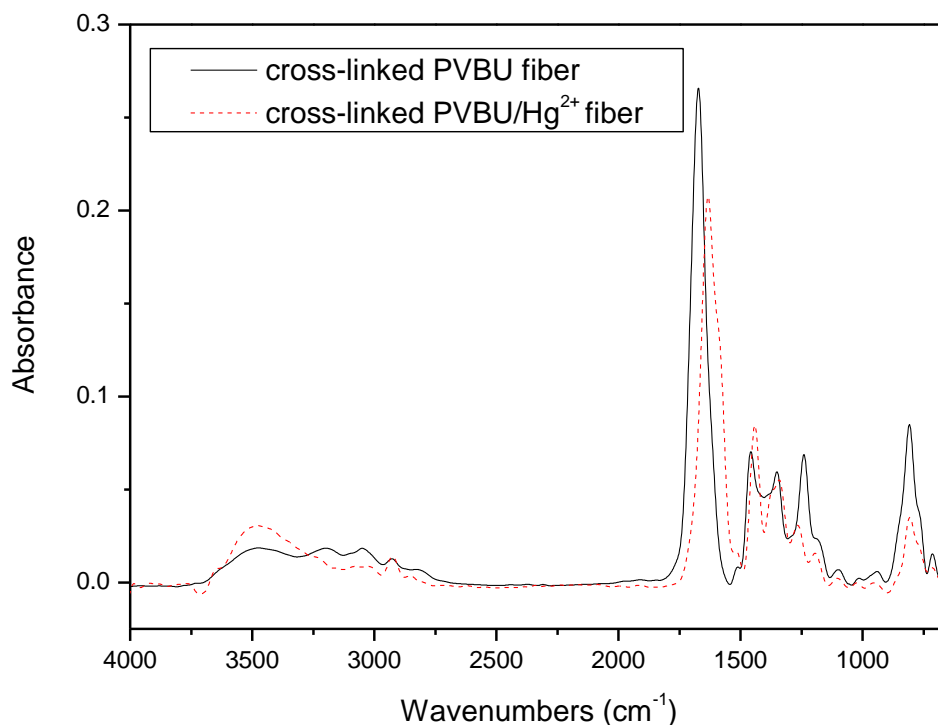
## Supporting Information

### Bioinspired Supramolecular Fibers for Mercury Ions Adsorption

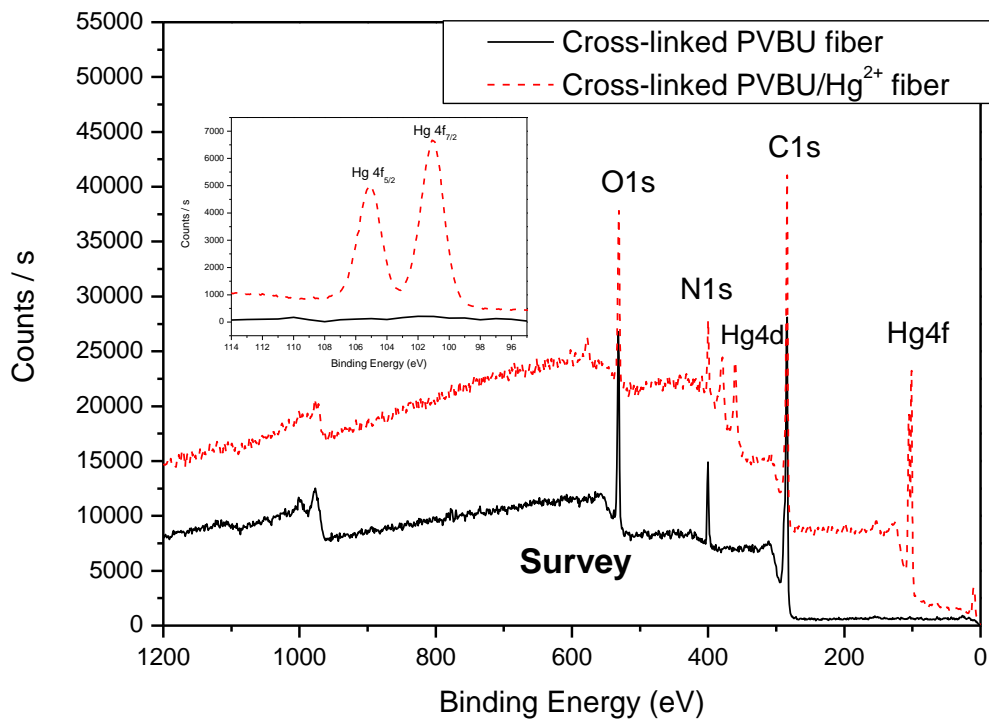
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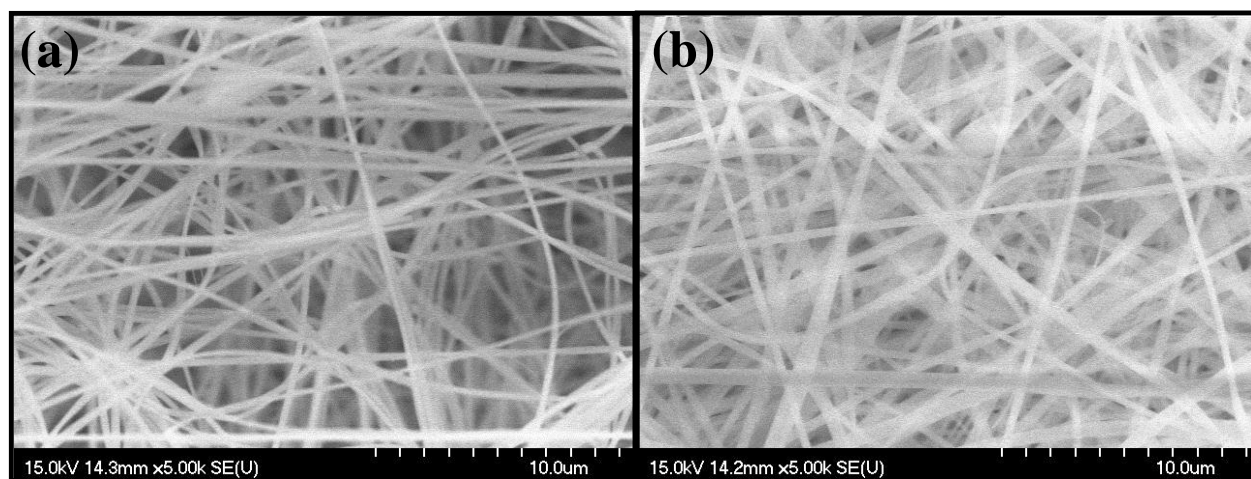
**Figure S1.** FT-IR spectra of cross-linked PVBU fiber and cross-linked PVBU/Hg<sup>2+</sup> fiber



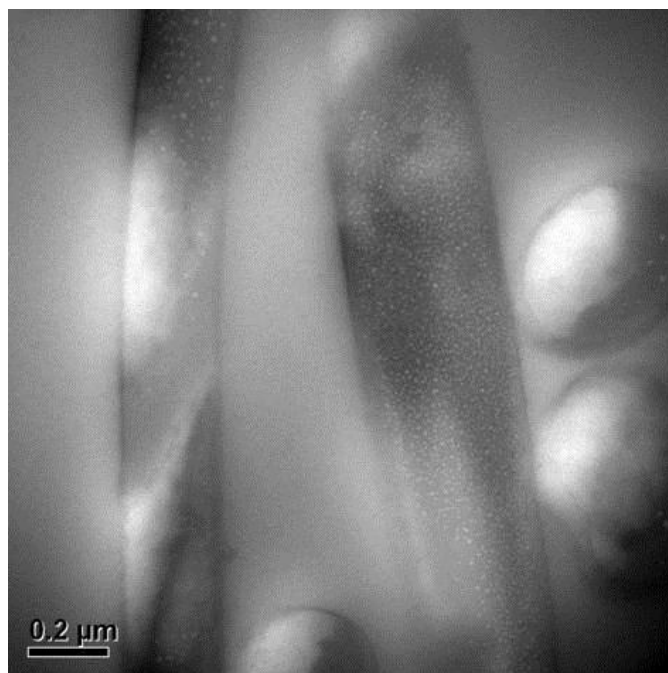
**Figure S2.** XPS spectra of cross-linked PVBU fiber and cross-linked PVBU/Hg<sup>2+</sup> fiber

**Table S1** Atom Ratio of complex cross-linked PVBU/Hg<sup>2+</sup> fiber

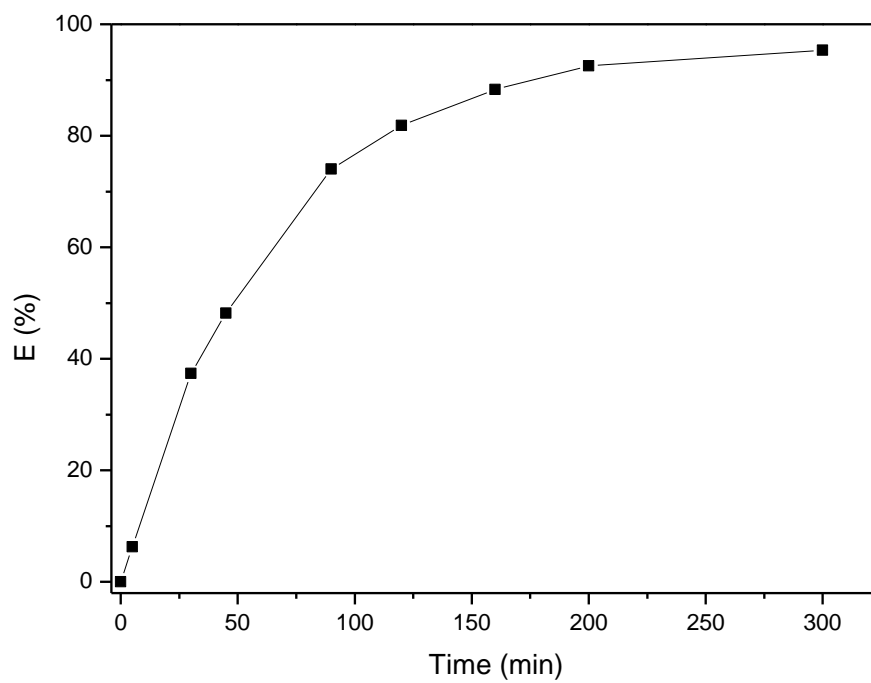
	Peak (eV)	Area (CPS*eV)	Corrected RSF	Atomic (%)
Hg4f	101.0	19792	461.6	2.6
N1s	399.6	4356	26.8	9.9
O1s	531.0	9354	39.5	14.4
C1s	283.9	20173	16.8	73.1



**Figure S3.** FE-SEM images of (a) PVBU fiber after adsorbing Hg<sup>2+</sup> (b) cross-linked PVBU fiber after adsorbing Hg<sup>2+</sup>



**Figure S4.** TEM image of cross-linked PVBU/Hg<sup>2+</sup> fiber



**Figure S5.** Adsorption kinetic of PVBU fiber for Hg<sup>2+</sup>