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3D Titanate Aerogel with Cellulose as Adsorption-aggregator for High Efficient Water Quality Purification

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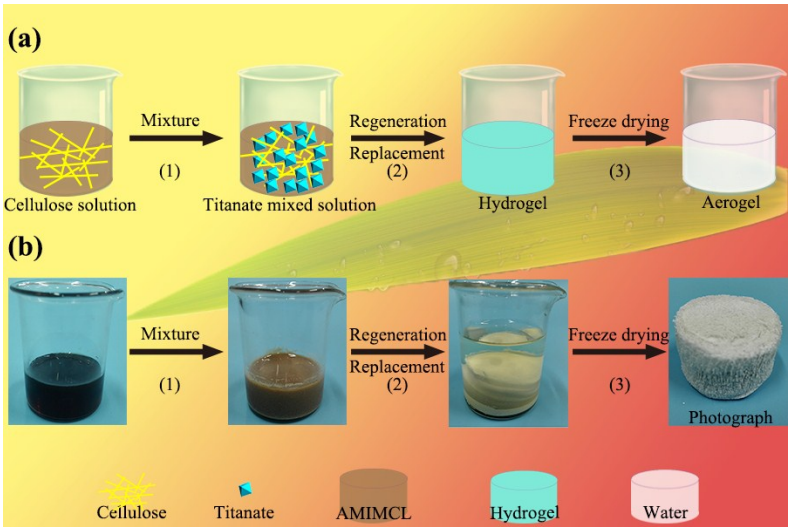

Figure S1. The schematic for the synthetic steps. **(1)** Titanate powder is dispersed into cellulose solution to generate a uniform suspension via vigorous stirring. **(2)** The composite hydrogel aere gotten after dipping the freezing mixture in solidification liquid. **(3)** 3-D network titanate aerogel is obtained after further freeze-drying.

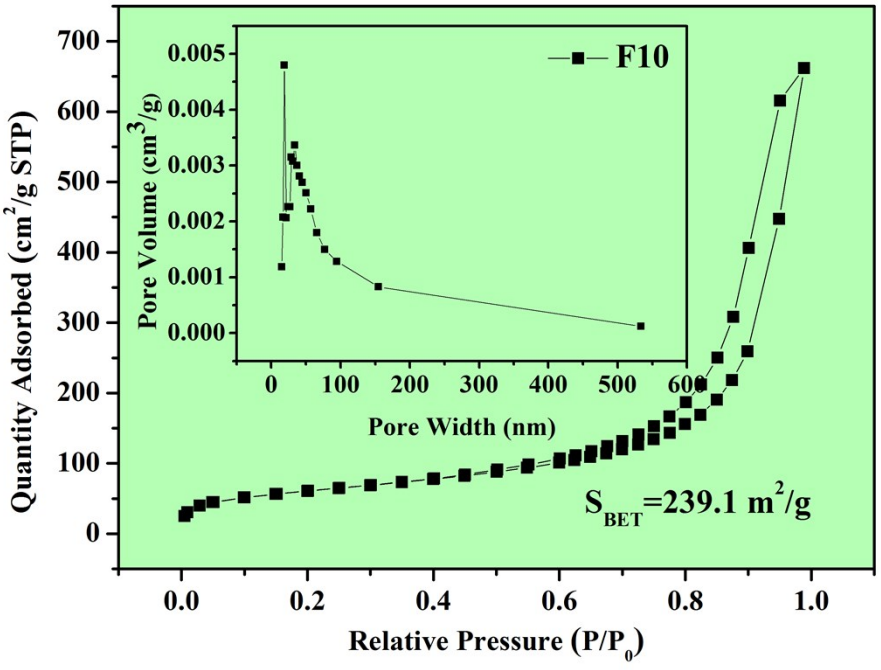

Figure S2. N_2 adsorption-desorption isotherm and the pore size distribution curve (inset) for the titanate aerogels.

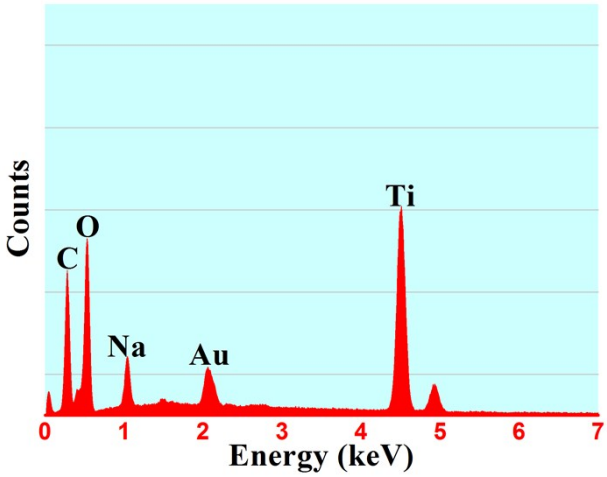

Figure S3. Energy spectrum of titanate aerogel.

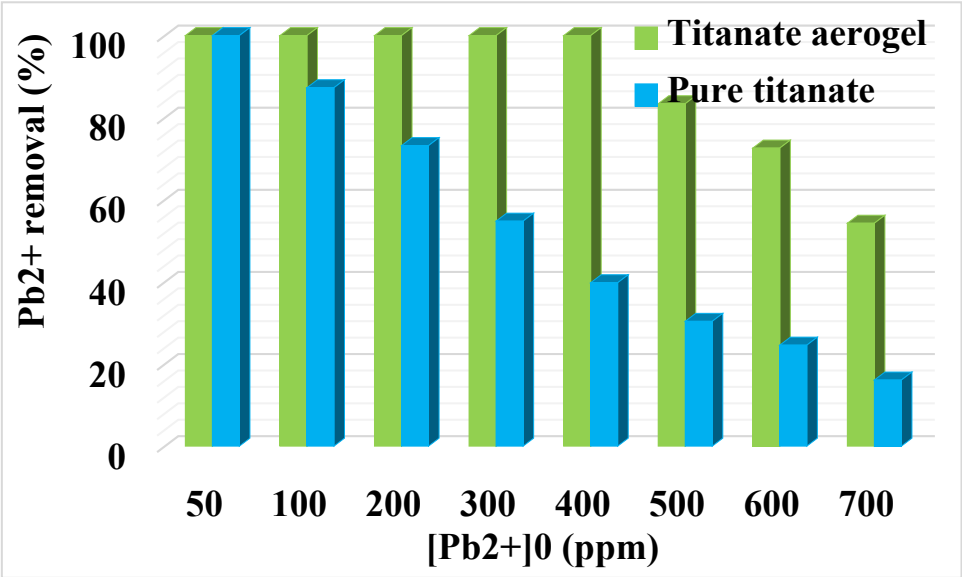

Figure S4. Removal of toxic Pb^{2+} ions by titanate aerogel and pure titanate.

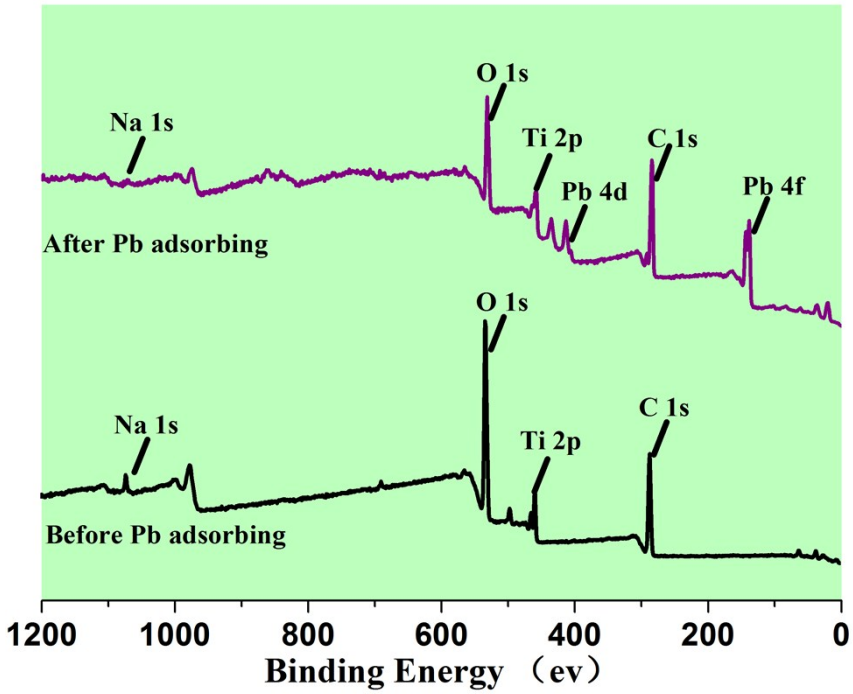

Figure S5. XPS spectrum of the titanate aerogel treated with Pb^{2+} solution for 48 h.