Anion-exchange Synthesis of Thermoelectric Layered SnS$_{0.1}$Se$_{0.9-x}$Te$_x$ Nano/microstructures in Aqueous Solution; Complexity and Carrier Concentration.†; Supporting Information.

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Figure S1. SEM images of SnS$_{0.1}$Se$_{0.9-x}$Te$_x$ nano/microstructures revealing the positions where EDS spectra in Figure 2g-i were collected: (a) $x = 0.02$, (b) $x = 0.05$, and (c) $c = 0.08$. 
Figure S2. Characterization of SnS$_{0.1}$Se$_{0.82}$Te$_{0.08}$ nano/microstructures: (a) HAADF-STEM image and (b-e) its corresponding element maps for Sn, S, Se and Te, respectively.
Figure S3. Characterization of SnS$_{0.1}$Se$_{0.82}$Te$_{0.08}$ nano/microstructures: (a) HAADF-STEM image and (b-e) its corresponding element maps for Sn, S, Se and Te, respectively.
Figure S4. (a-c) Rietveld-refined lattice parameters and (d) unit cell volumes as a function of Te concentration (x) for SPS-SnS$_{0.1}$Se$_{0.9-x}$Te$_x$ (x = 0.02, 0.05, 0.08). The linear fits to each set of data are indicated by the red dashed/dotted line.
**Figure S5.** SEM images of SnS$_{0.1}$Se$_{0.9-x}$Te$_x$ pellets revealing the positions where EDS spectra in Figure 5g-i were collected: (a) $x = 0.02$, (b) $x = 0.05$, and (c) $c = 0.08$. 
Figure S6. Characterization of SPS-SnS$_{0.1}$Se$_{0.88}$Te$_{0.02}$: (a) HAADF-STEM image and (b-e) its corresponding element maps for Sn, S, Se and Te, respectively.
Figure S7. Characterization of SPS-SnS$_{0.1}$Se$_{0.82}$Te$_{0.08}$ (peeled plate 1): (a) HAADF-STEM image and (b-e) its corresponding element maps for Sn, S, Se and Te, respectively.
Figure S8. Characterization of SPS-SnS$_{0.1}$Se$_{0.82}$Te$_{0.08}$ (peeled plate 2): (a) HAADF-STEM image and (b-e) its corresponding element maps for Sn, S, Se and Te, respectively.