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(Supporting Information)

High Energy Density for Rechargeable Metal-Free Seawater Batteries: Phosphorus/Carbon Composite as a Promising Anode Material

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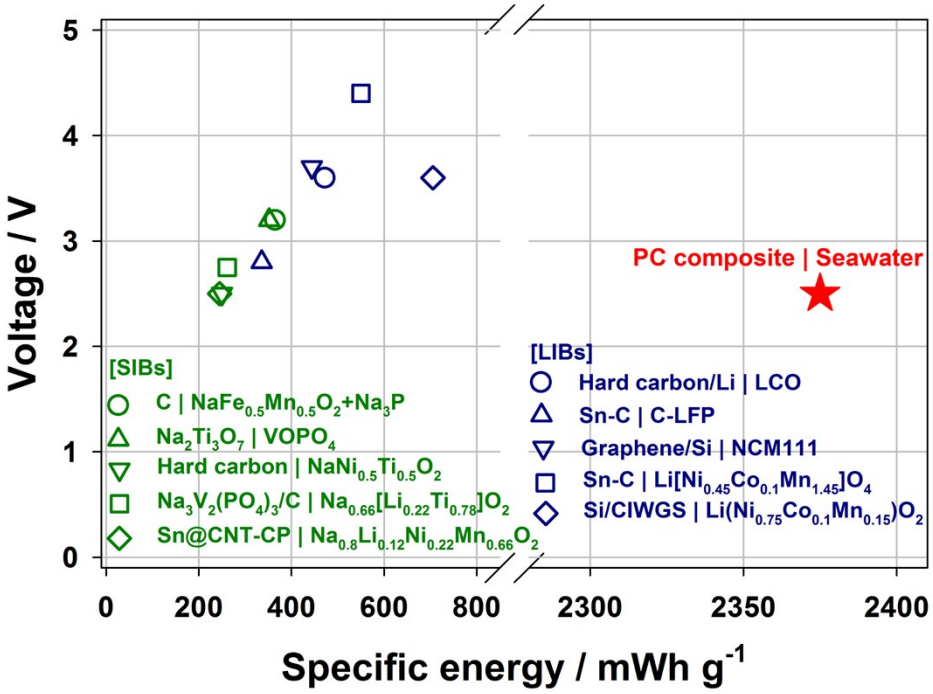

Fig. S1 Comparison of specific energy density–voltage properties of full-cell systems, such as SIBs, LIBs, and seawater batteries

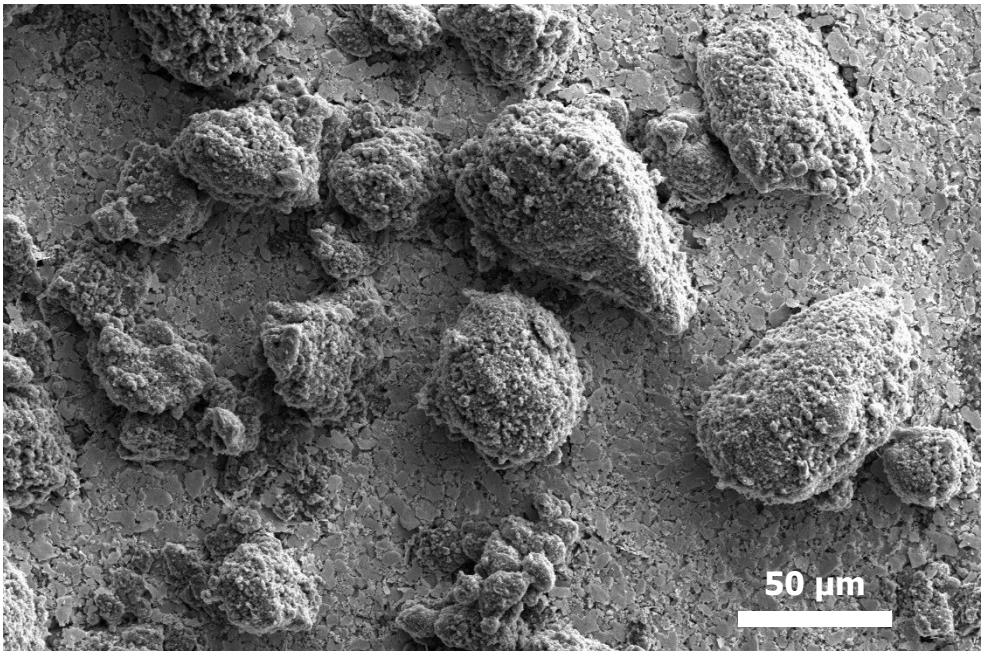

Fig. S2 SEM image of PC composite particles

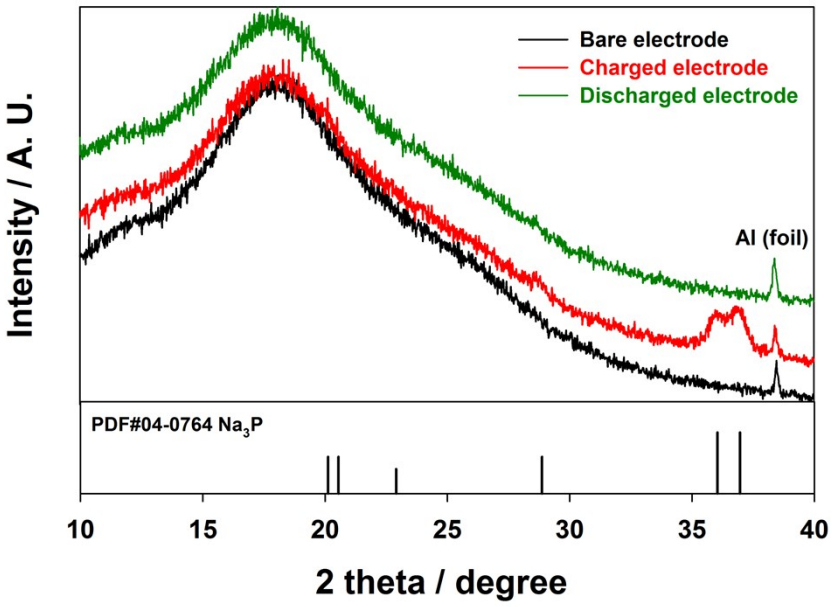

Fig. S3 Ex-situ XRD patterns of pristine, charged, and discharged PC composite electrodes in Na-ion half-cells

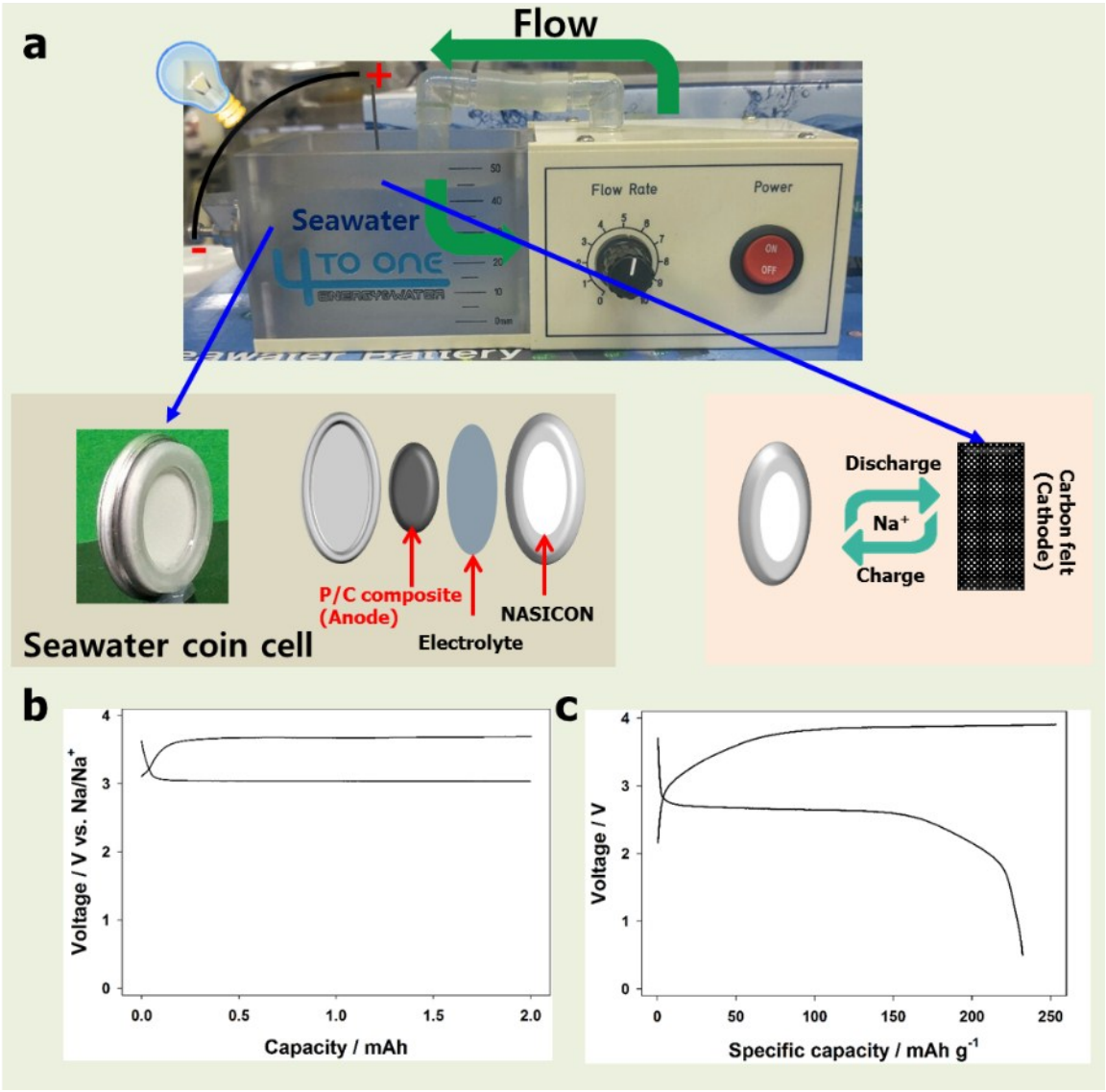

Fig. S4 (a) Seawater-flow cell tester and cell components, and examples of charge–discharge voltage profiles of seawater-flow cells with (b) Na metal and (c) hard carbon anodes

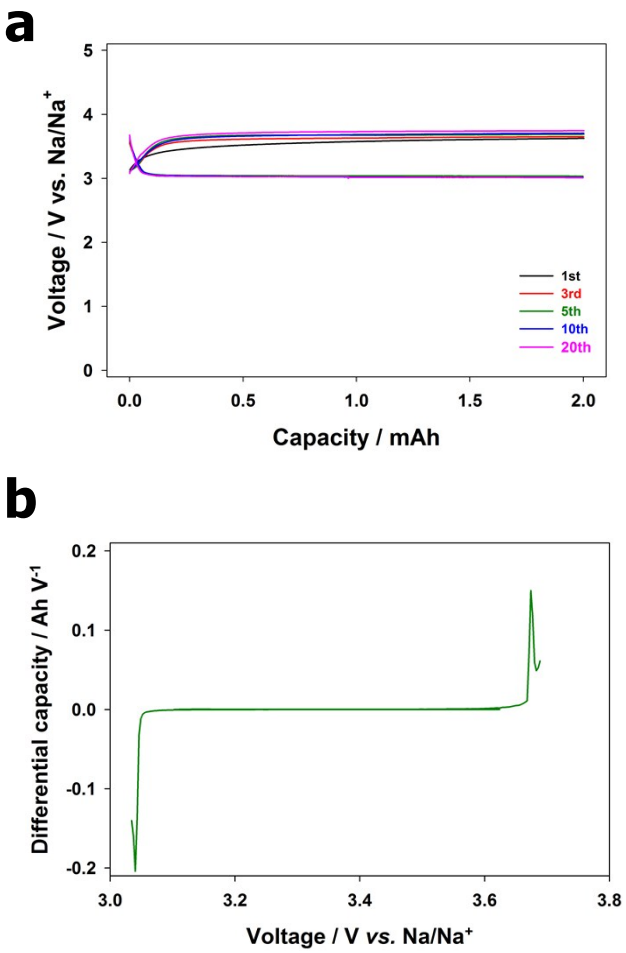

Fig. S5 (a) Charge–discharge voltage profiles of seawater-flow half-cell (Na metal | Seawater) over 20 cycles, and (b) enlarged differential capacity plots (dQ/dV) of voltage profile of seawater- flow half-cell

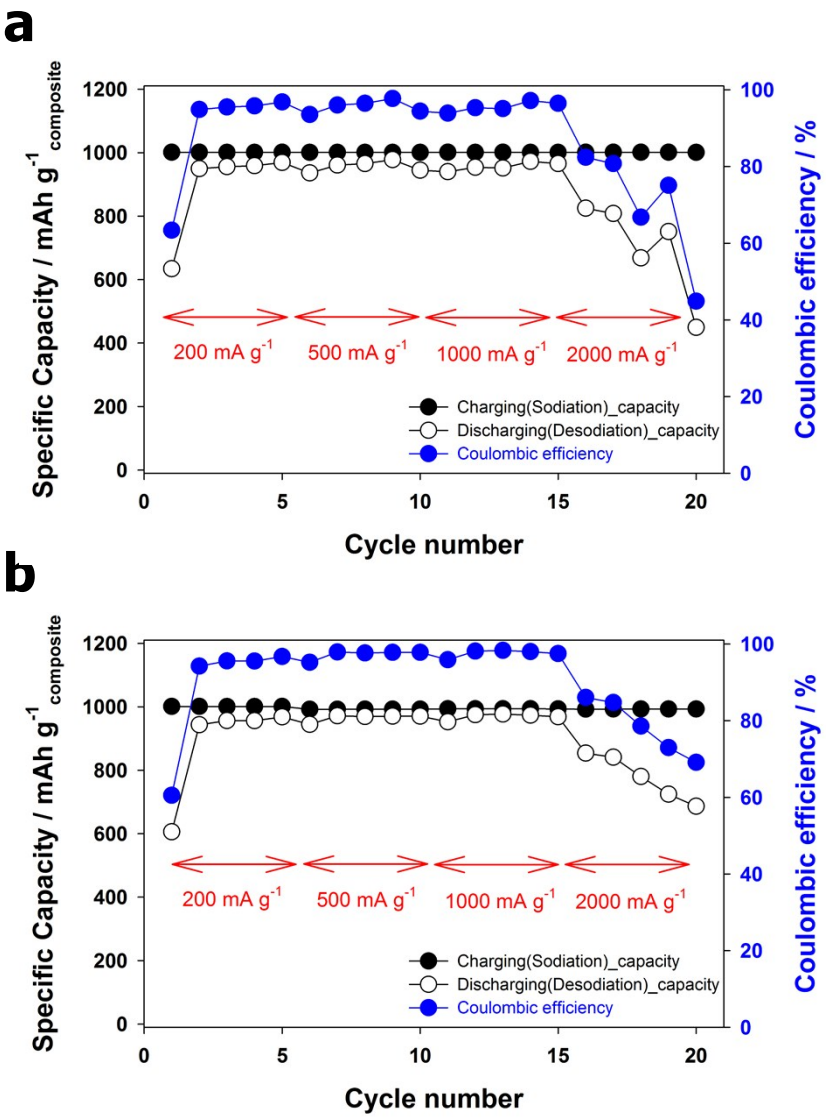

Fig. S6 Rate performance of seawater-flow full-cell using PC composite anode; capacity retention after cycling with (a) fixed charging current and (b) increasing current