

Supporting Information

Guiding Uniform Zn Electrodeposition through Regulating Pressure for Stable Aqueous Zn Batteries

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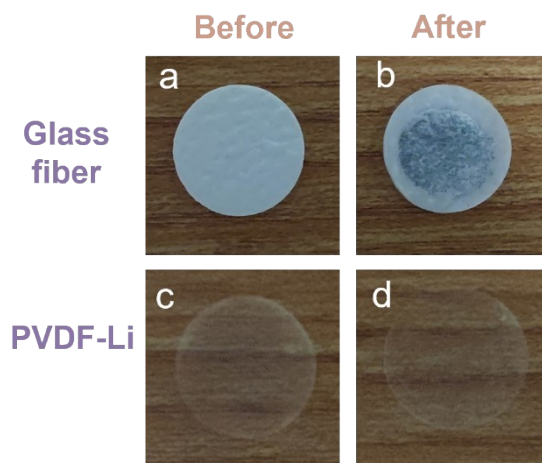


Fig. S1. Optical photograph of (a-b) Glass fiber and (c-d) PVDF-Li separators before and after 10 cycles under the pressure of 600 kPa, respectively

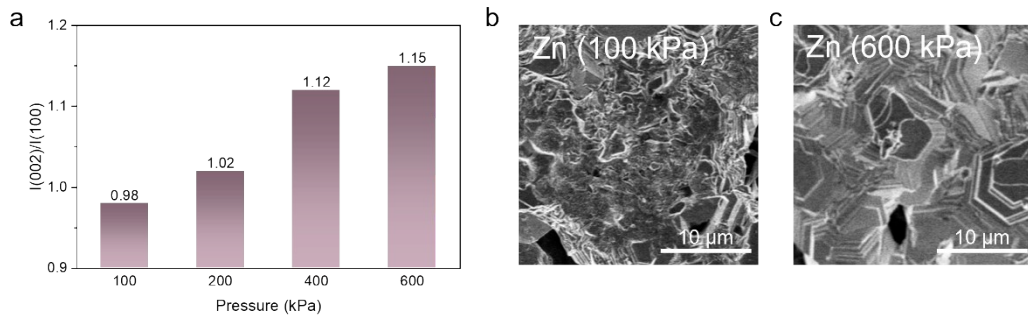


Fig. S2. (a) $I_{(002)}/I_{(100)}$ peak intensity of Zn anodes under different stack pressures after 10 cycles. SEM images of Zn anodes under (b) 100 kPa and (c) 600 kPa after 50 cycles.

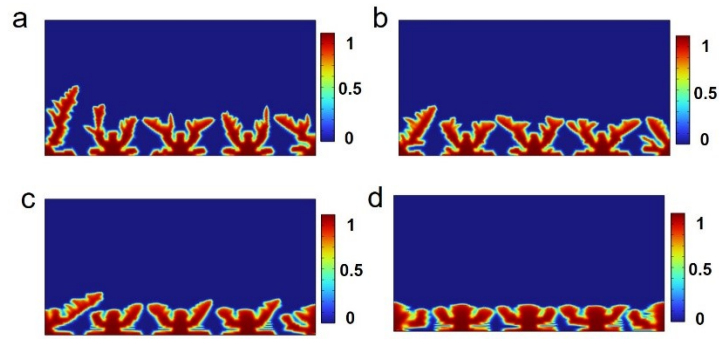


Fig. S3. The morphology of the Zn dendrites after growth time of 5 seconds under the pressure of (a) 100 kPa, (b) 200 kPa, (c) 400 kPa and (d) 600 kPa respectively. The colour bar represents the value of the phase-field variable ξ .

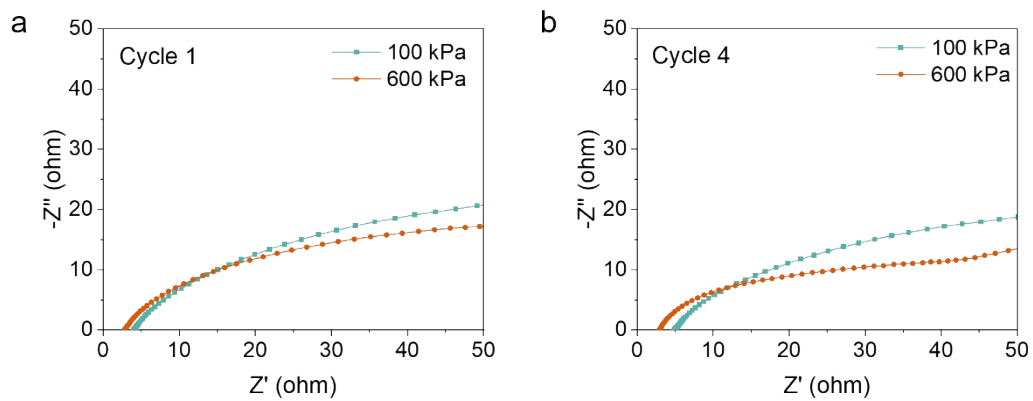


Fig. S4. Nyquist curves for the Zn-Zn cells after (a) 1 cycle and (b) 4 cycles under relatively low and high stack pressures.

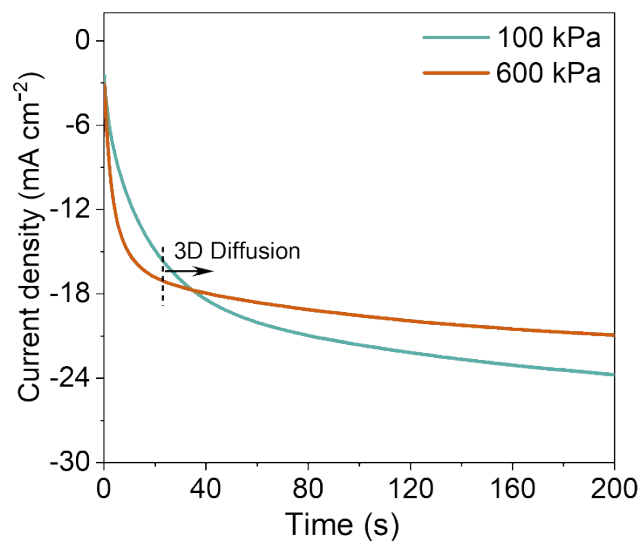


Fig. S5. Chronoamperometry tests for Zn deposition behavior at a constant overpotential of -150 mV under 100 kPa and 600 kPa.