Electronic Supplementary Material (ESI) for Materials Advances.

Supporting Information

Freestanding bilayered vanadium oxide films synthesized by facile, liquid exfoliation of chemically preintercalated δ-$Li_xV_2O_5{\cdot}nH_2O$

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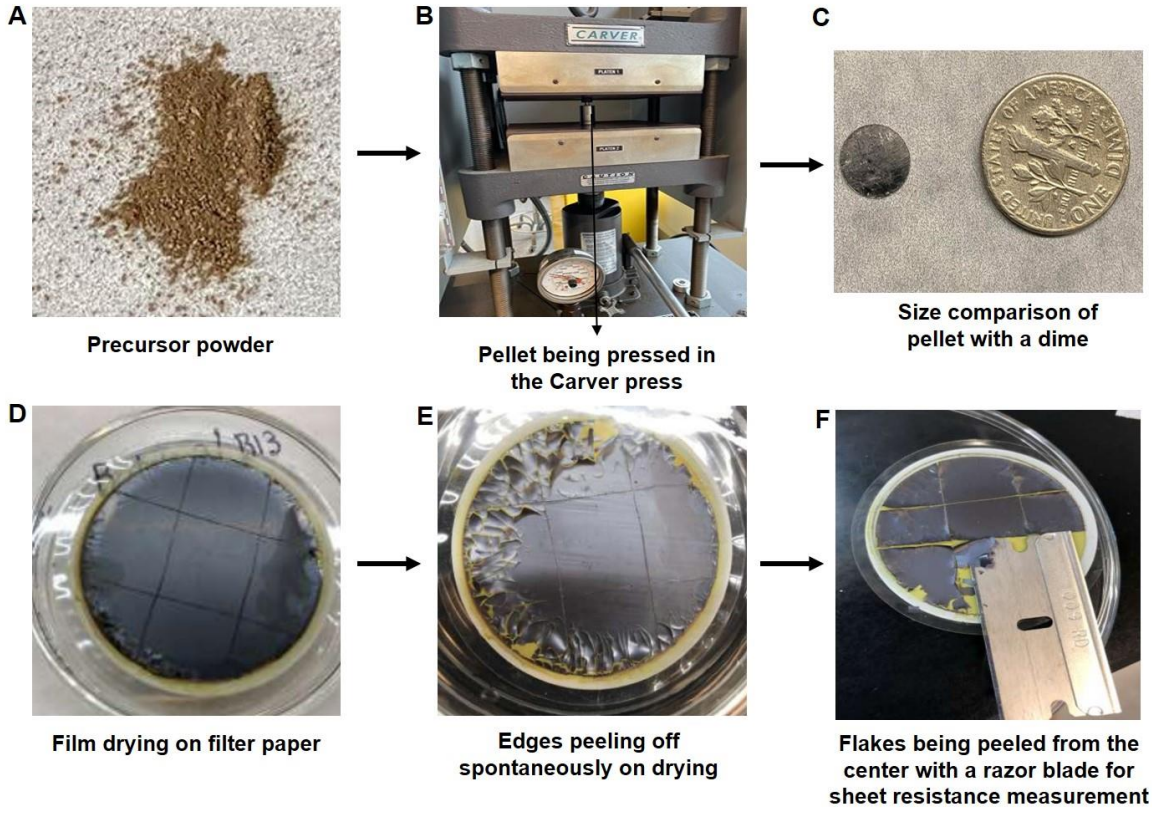

Figure S1. Sample preparation process for sheet resistance measurement of (A-C) precursor powder and (D-F) freestanding film. (A) Yellowish brown δ-$Li_xV_2O_5{\cdot}nH_2O$ powder, **(B)** 10 mg of powder filled in the cavity of steel die and pressed at ~ 10,000 kPa for 10-15 seconds, **(C)** Dark colored, circular pellet obtained, placed beside a dime for size comparison, **(D)** Dark colored film in the process of drying, **(E)** Dried film, demonstrating a deep brownish color, and flakes peeling off from the sides, **(F)** Flakes being gently removed with a razor blade for conductivity measurements.

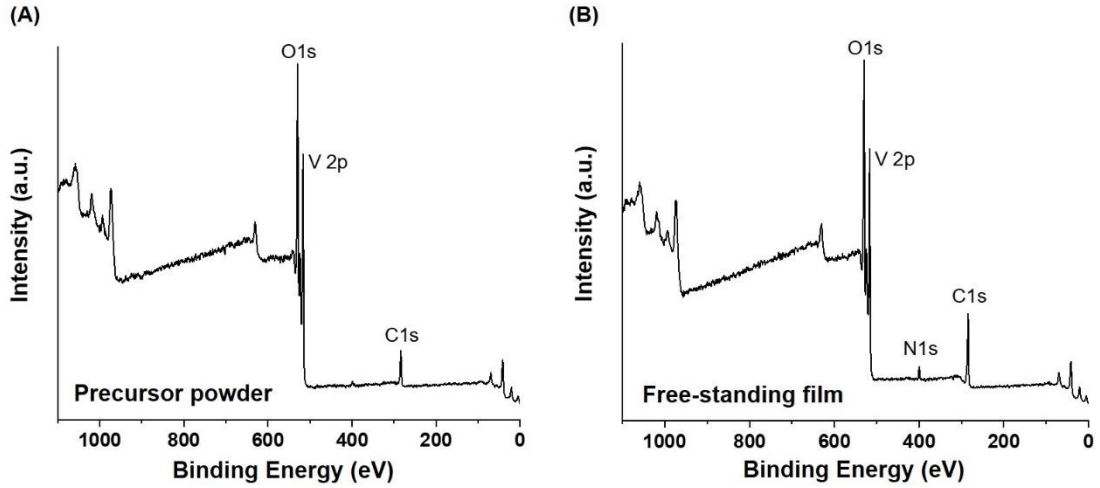

Figure S2. XPS survey scans of the (a) precursor powder and (b) free-standing film.

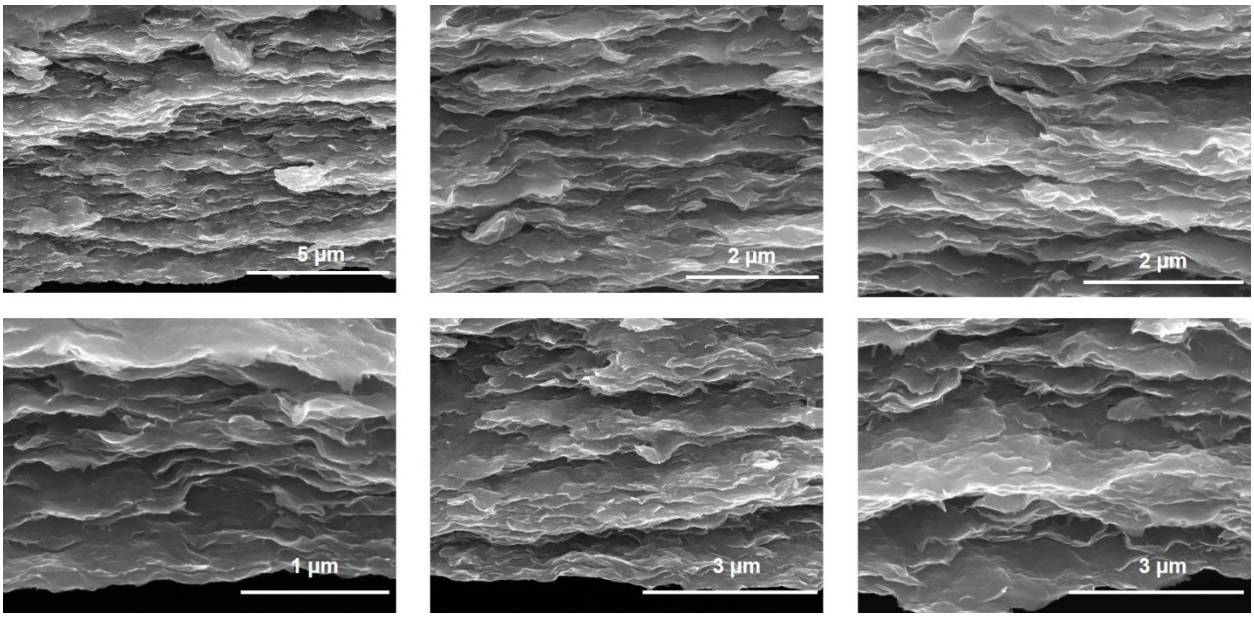

Figure S3. Additional cross-sectional SEM images of the freestanding film produced by exfoliation of δ-$Li_xV_2O_5{\cdot}nH_2O$ precursor powder followed by vacuum filtration.