

Supplementary information

Wide-gamut dynamic color modulation via combined localized surface plasmon resonance and electrochromism

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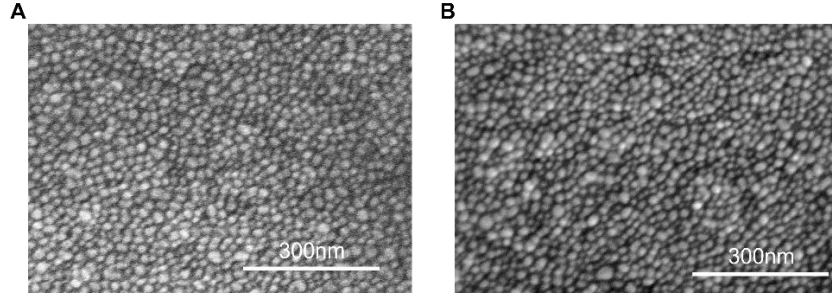


Figure S1. SEM images of single-layer Ag NPs films deposited on glass substrates under different Ar pressures. (A-B) SEM image of ellipsoidal Ag NPs deposited on glass substrates by magnetron sputtering under an Ar working pressure of 6 Pa and 5 Pa.

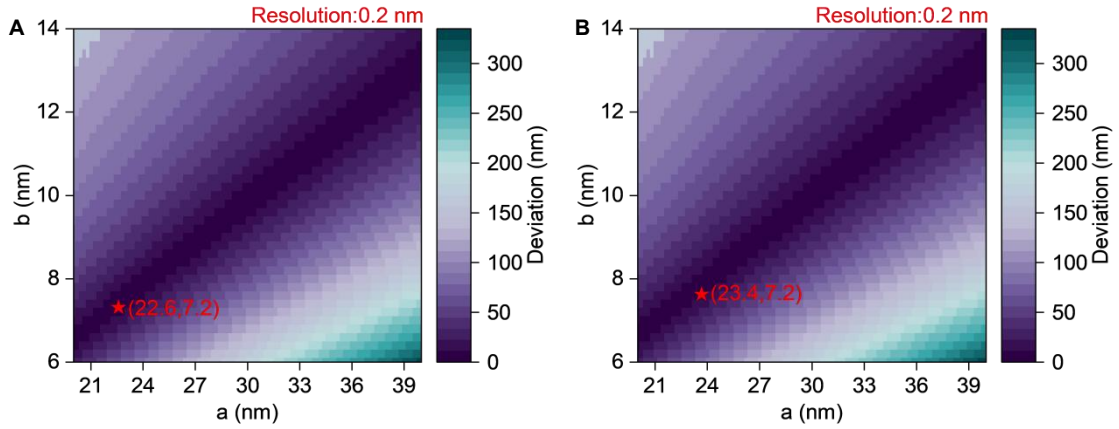


Figure S2. Grid-search-based optical retrieval of Ag NPs dimensions under different pressures. (A–B) Grid-search matching results for the optimized long-axis (a) and short-axis (b) dimensions of Ag NPs deposited at 6 and 5 Pa, respectively.

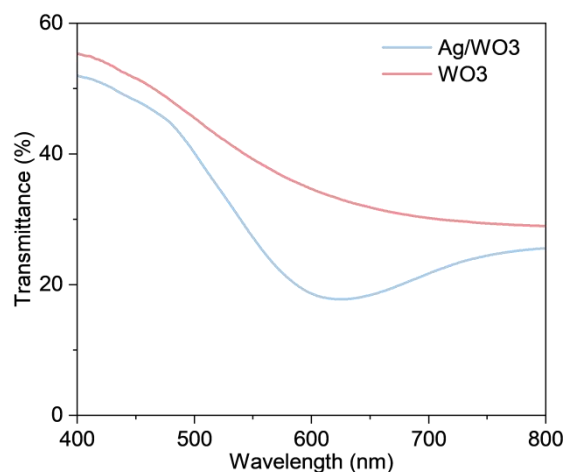


Figure S3. Transmission spectra of the WO_3 only and Ag NPs/ WO_3 electrodes measured under the same electrochemical potential, showing the characteristic LSPR-related spectral feature of the Ag NPs/ WO_3 electrode.

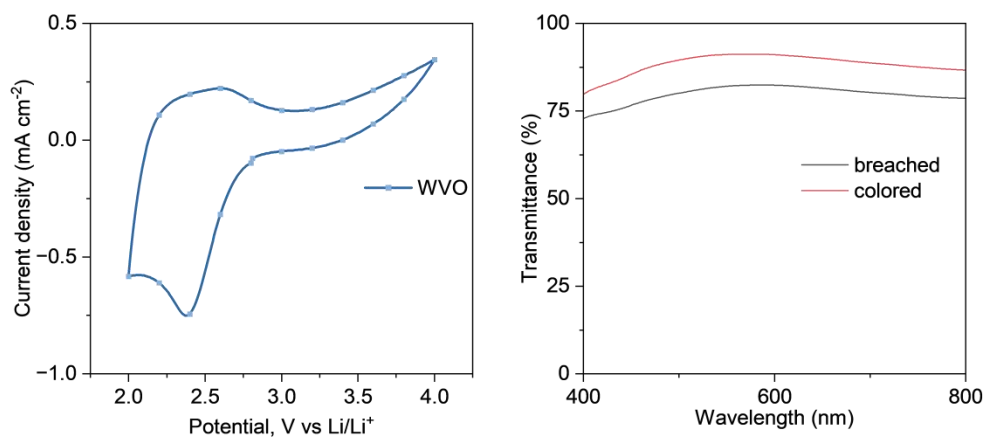


Figure S4. Electrochemical and optical characterization of WVO films. (A) CV curves of WVO film with marked thicknesses measured at 10 mV s^{-1} in 2.0-4.0 V vs Li/Li^+ . (B) Transmission spectra of the WVO film in the bleached and colored states.

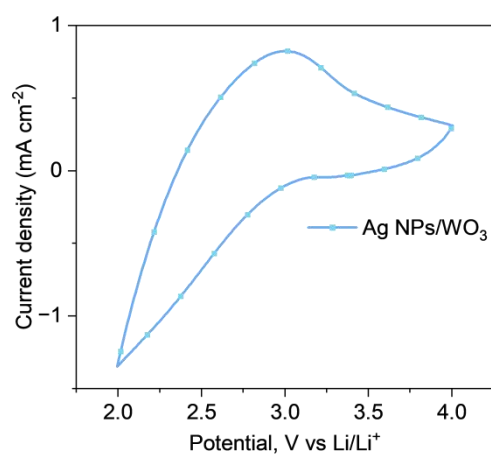


Figure S5. CV curves of Ag NPs/WO₃ with marked thicknesses measured at 10 mV s⁻¹ in 2.0-4.0 V vs Li/Li⁺.

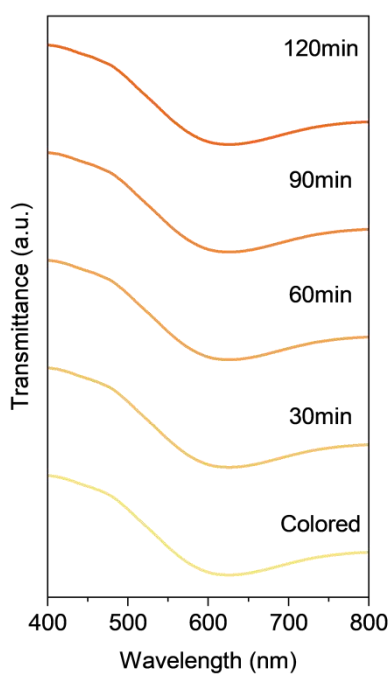


Figure S6. The transmission spectra of the Ag NPs/WO₃ device in the colored state were maintained for 120 min.