**Supporting Information**

**Title**

**Compensative electrochromic device utilizing electro-deposited plasmonic silver nanoparticles and manganese oxide to achieve retention of chromatic color**

**Authors**

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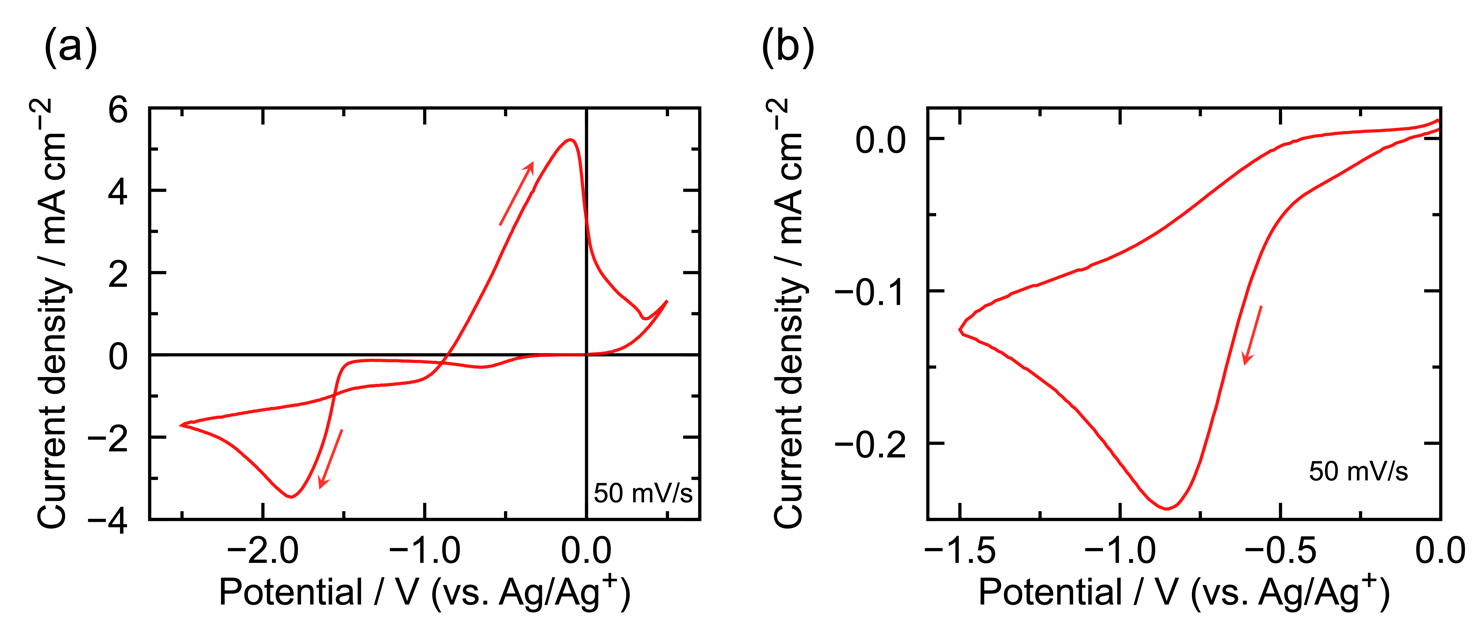
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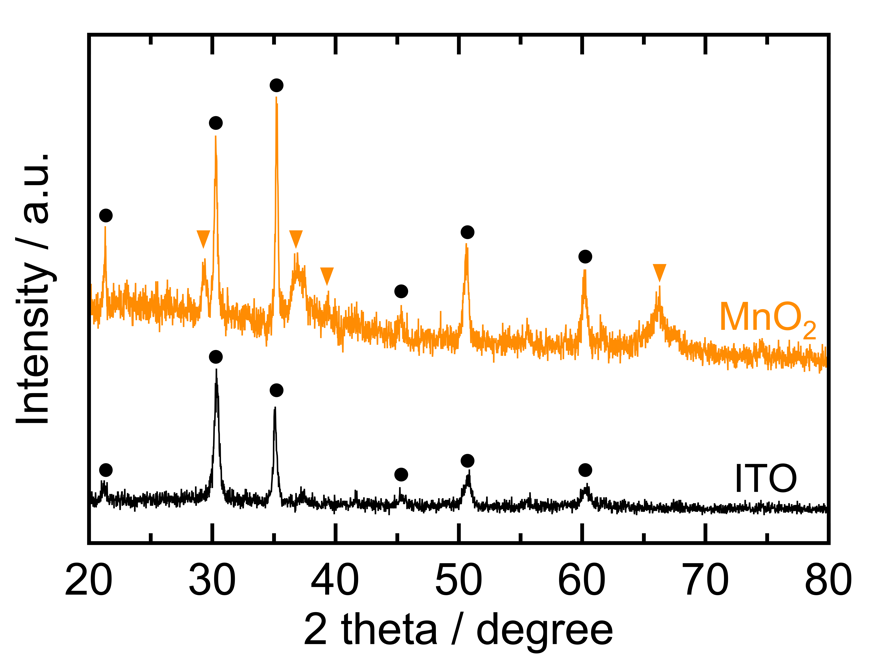
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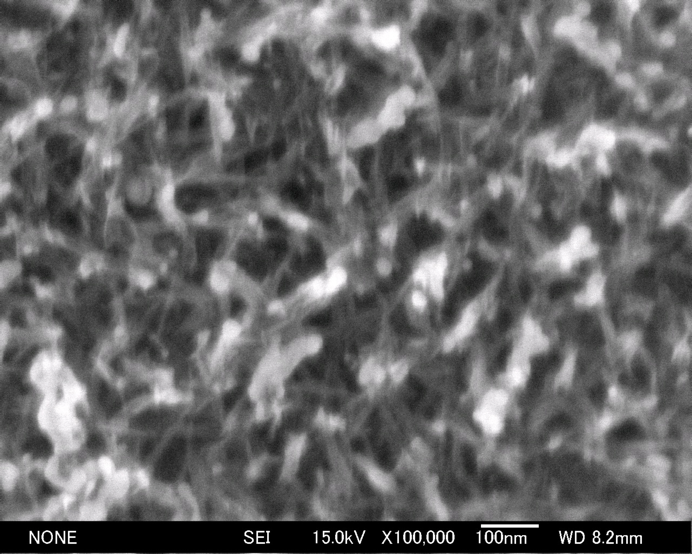
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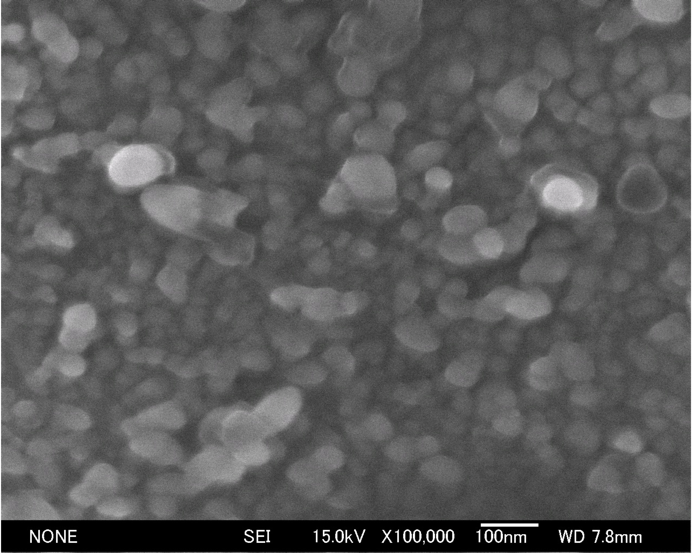
**Figure S1.** Cyclic voltammograms for DMSO-based solutions containing the below solutes. ITO electrodes were used as the working electrode. (a) 50  mmol L–1 AgNO3, 5 mmol L–1 CuCl2, and 250 mmol L–1 LiBr. (b) 5 mmol L–1 CuCl2, and 250 mmol L–1 LiBr.

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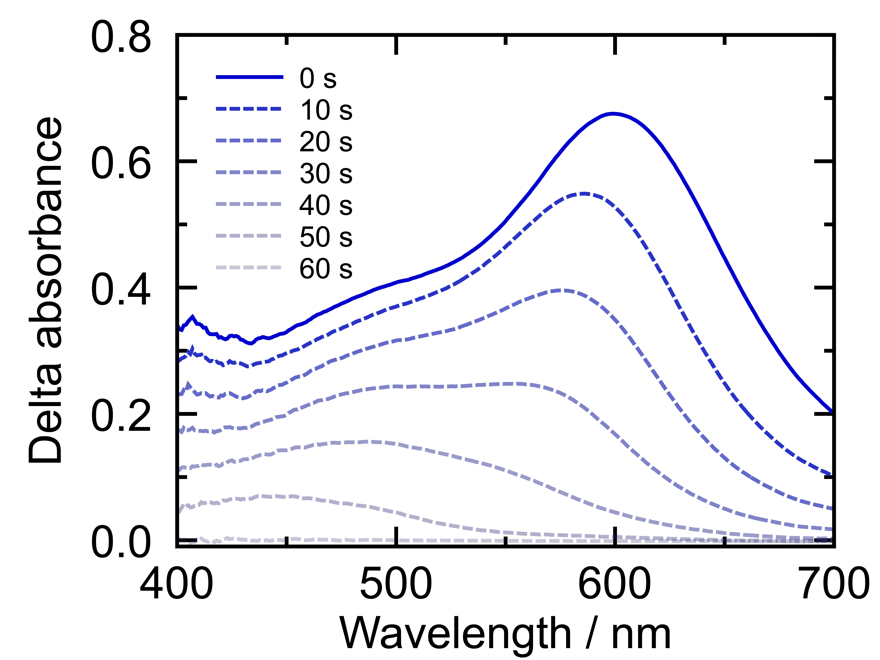
**Figure S2.** X‐ray diffraction pattern of the MnO2 film obtained on the ITO electrode. X‐ray diffraction pattern of the ITO electrode is also denoted by a black line. Peaks attributed to MnO2 and ITO are indicated by orange triangle symbols and black circle symbols, respectively.

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**Figure S3.** FE-SEM image of the surface of obtained MnO2 film.

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**Figure S4.**  FE-SEM image of electrode surface where silver nanoparticles were electrochemically deposited. Voltage application sequence: *V*1 = –3.0 V, *t*1 = 80 ms; and *V*2 = –1.4 V, *t*2 = 60 s.

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**Figure S5.** Change in the absorption spectra of the previous device containing CuCl2 in the electrolyte solution under the open-circuit condition. The initial cyan state (0 s) is observed immediately after finishing voltage application. Voltage application sequence: *V*1 = –3.4 V, *t*1 = 70 ms; and *V*2 = –1.7 V, *t*2 = 80 s. As a reference, the device was used in its initial state. Therefore, delta absorbance indicates an absorption caused only by deposited silver.