Supporting Information

Multicolor electrochromic film based on SnO_2/V_2O_5 core/shell structure for adaptive camouflage

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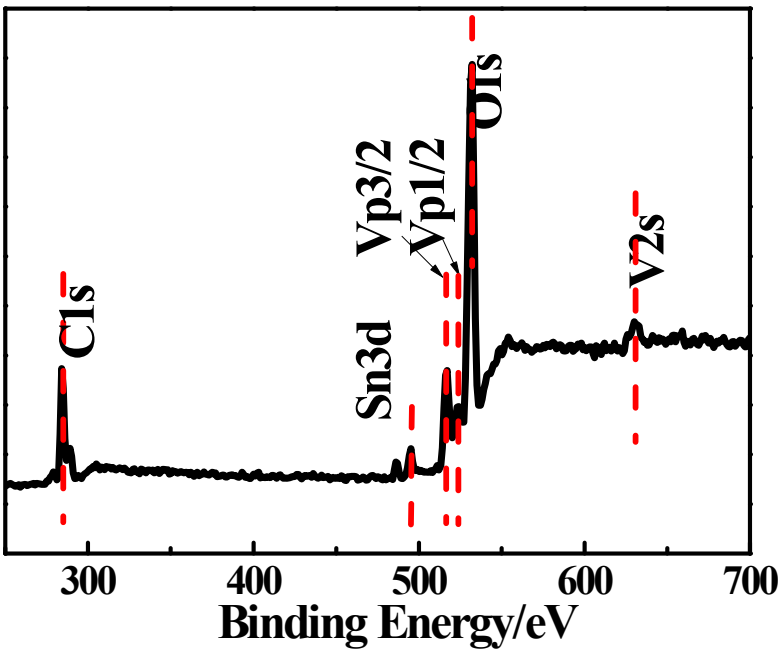

Fig. S1 Wide-range XPS spectrum of SnO_2/ V_2O_5 composite film.

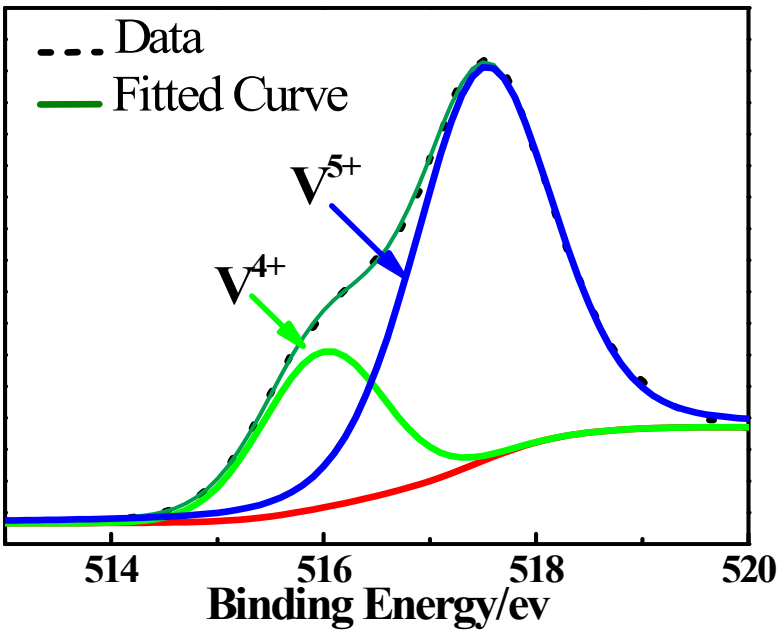

Fig. S2 High-resolution $Vp_{3/2}$ spectrum before cycling in SnO_2/V_2O_5 composite film.

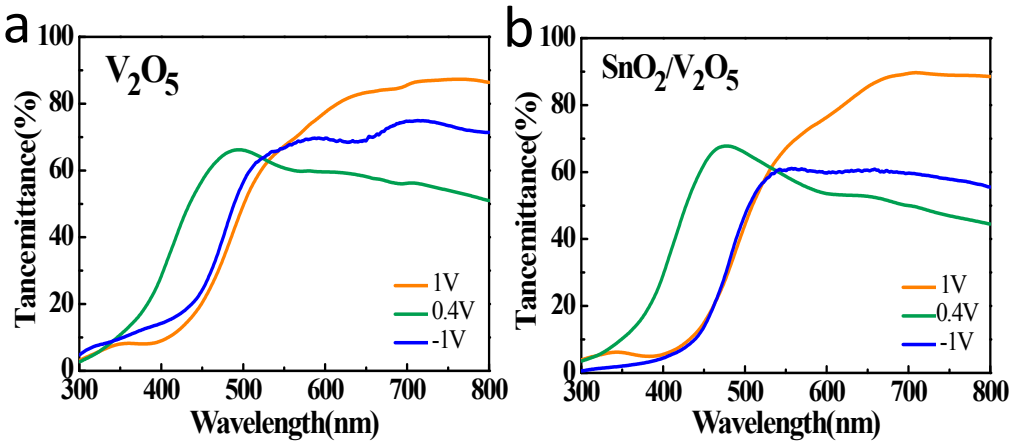

Fig. S3 Optical transmittance spectra of the V_2O_5 and SnO_2/ V_2O_5 films from 300 to 800 nm at polarization voltages of 1 V, 0.4 V, −1 V.

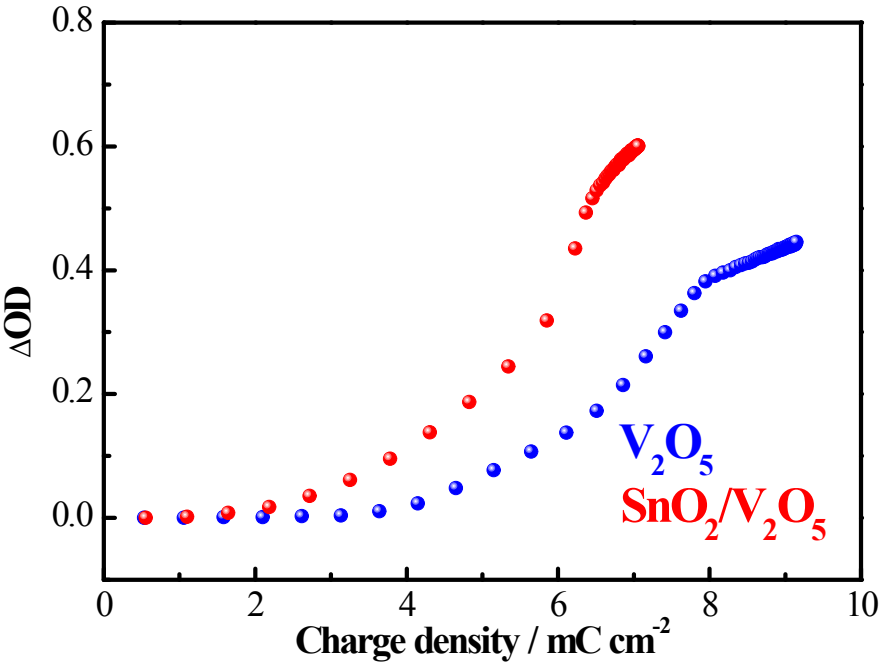

Fig. S4 Variation of the optical density (*OD*) vs. charge density for the V_2O_5 and SnO_2/ V_2O_5 films at 450 nm.

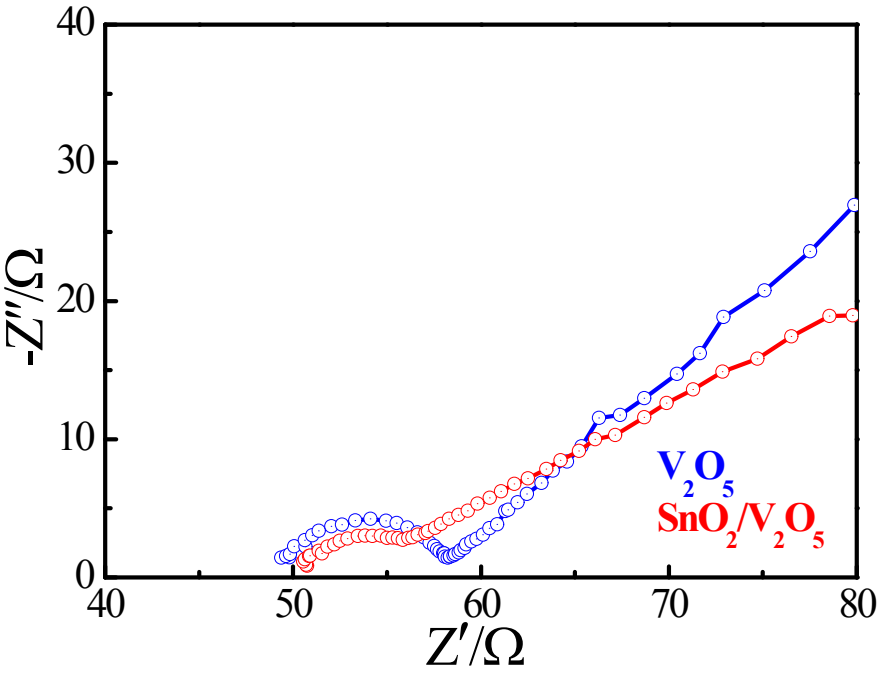

Fig. S5 Nyquist plots of V_2O_5 and SnO_2/V_2O_5 film electrodes.

Table S1 Fitting results of $V2p_{3/2}$ core XPS spectra of SnO_2/V_2O_5 composite film at different polarization potentials.

Different working states	Binding Energy for V^{5+}	V^{5+} peak area percent	Binding Energy for V^{4+}	V^{4+} peak area percent
As-prepared	517.5 eV	76.2 %	516.0 eV	23.8 %
1 V	517.4 eV	76.0 %	515.9 eV	24.0 %
0 4 V	517.5 eV	55.2 %	516.0 eV	44.8 %
–1 V	517.3 eV	43.7 %	516.1 eV	56.3 %