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**Supplementary Information** 

## Spray coated ultrathin films from aqueous tungsten molybdenum oxide nanoparticle ink for high contrast electrochromic application

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Fig. S1 Digital photo of the spray coated W<sub>0.71</sub>Mo<sub>0.29</sub>O<sub>3</sub> film showing pale-yellow color, which suggests the elimination of oxygen vacancies



Fig. S2 (a) Comparison of Mo 3d XPS of the drop casted film and spray coated film, the corresponding fitted spectrum of drop casted film (b) and spray coated film (c).



Fig. S3 EDS mapping image of the spray coated  $W_{0.71}Mo_{0.29}O_3$  film.



Fig. S4 Contrast density of our previous reported self-seeded grown WO<sub>3</sub> · 0.33H<sub>2</sub>O film.<sup>1</sup>



Fig. S5 OD variation with respect to the charge density for the spray coated  $W_{0.71}M_{00.29}O_3$  film measured at 632.8



Fig. S6 SEM images of (a) spray coated film and (b) drop casted film after 2000 electrochromic cycles.

1. H. Li, G. Shi, H. Wang, Q. Zhang and Y. Li, J. Mater. Chem. A, 2014, 2, 11305.