## **Supporting Information**

## MULTI-FUNCTIONAL REACTIVELY-SPUTTERED COPPER OXIDE ELECTRODES FOR SUPERCAPACITOR AND ELECTRO-CATALYST IN DIRECT METHANOL FUEL CELL APPLICATIONS

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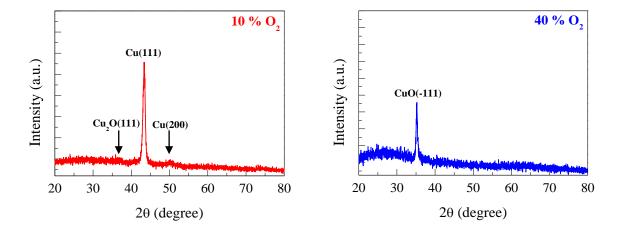
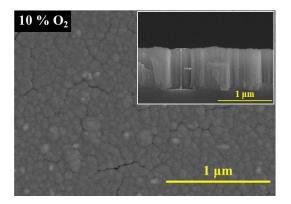
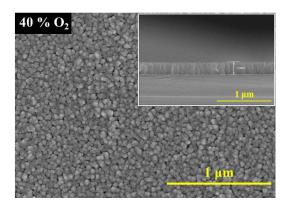


Fig. S1 X-ray diffraction patterns of the copper oxide electrode films deposited with 10% and 40% oxygen flow rates.





**Fig. S2** Plane and cross-sectional (inset) SEM images of copper oxide electrode films deposited with 10% and 40% oxygen flow rates.

**Table 1:** Compositional analysis of the copper oxide electrode films ( $Cu_xO$ ) deposited with different oxygen flow rate percentages.

Film	% of oxygen flow rate during deposition	At. % of Cu	At. % of O	x
Cu <sub>x</sub> O	10	86.33	13.67	6.32
	20	70.21	29.79	2.36
	30	53.14	46.86	1.13
	40	51.68	48.32	1.07