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## **Supporting Figures and Tables**



Fig. S1 SEM image ( $\Im$ 60,000) of (a) CB (b) CB<sub>sn</sub> (c) MWCNTs (d) MWCNT<sub>sn</sub>.



**Fig. S2** TGA thermograms obtained from thermal decomposition of different carbon supports.



Fig. S3 The Raman spectrum of CB compared to  $CB_{sn}$  (top) and MWCNTs compared to  $MWCNT_{sn}$  (bottom).

Support	$I_D/I_G$ ratio	
СВ	0.837	
CB <sub>sn</sub>	0.828	
MWCNT	0.803	
MWCNT <sub>sn</sub>	0.970	

Table SI The  $I_D/I_G$  ratio of different carbon supports.



Fig. S4 BET plots of different carbon supports.

Type of supports	$\mathbf{S}_{\mathrm{BET}}$	Average pore size	Total pore volume
	$(m^{2}/g)$	(nm)	$(cm^{3}/g)$
СВ	427.40	12.28	1.31
MWCNT	221.00	27.33	1.51
CB <sub>sn</sub>	132.10	16.14	0.53
MWCNT <sub>sn</sub>	126.00	11.92	0.38

**Table SII** BET surface area ( $S_{BET}$ ), average pore size and total pore volume of different carbon supports.