

Supplementary file

Potential Role of Metal Impurities in the Acute Lung Inflammogenicity of Multi-Walled Carbon Nanotubes

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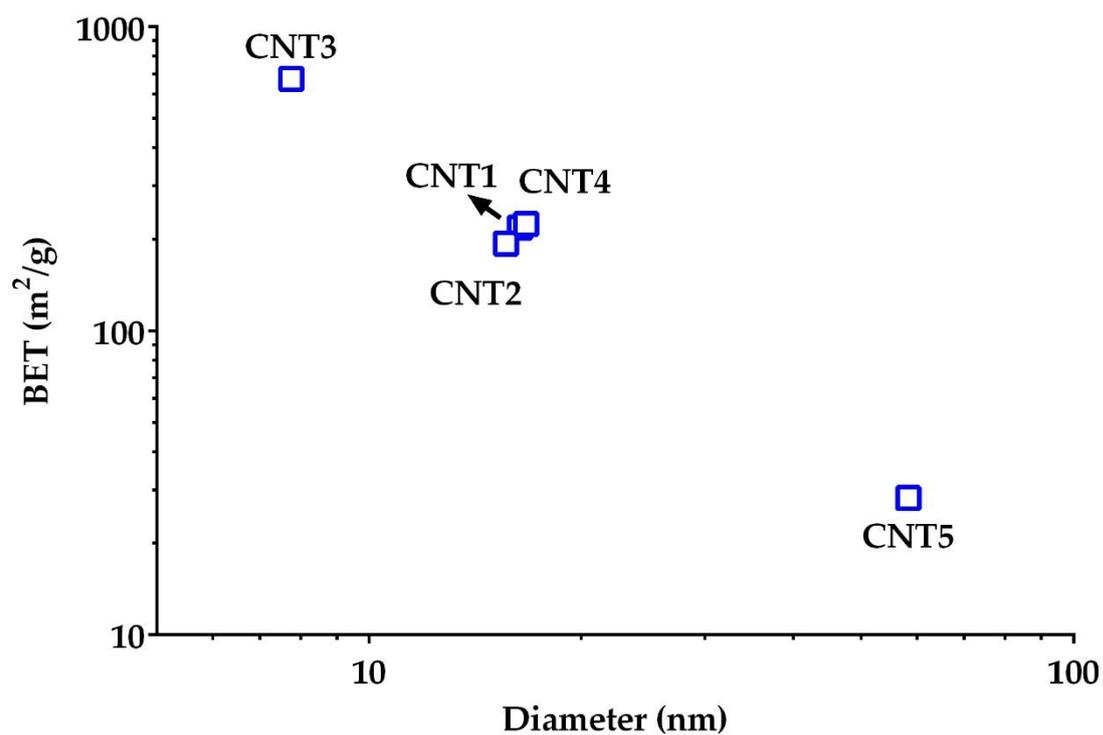


Figure S1. The correlation plot between the diameter of MWCNTs and BET. Note that both axes were expressed as log₁₀ scale.

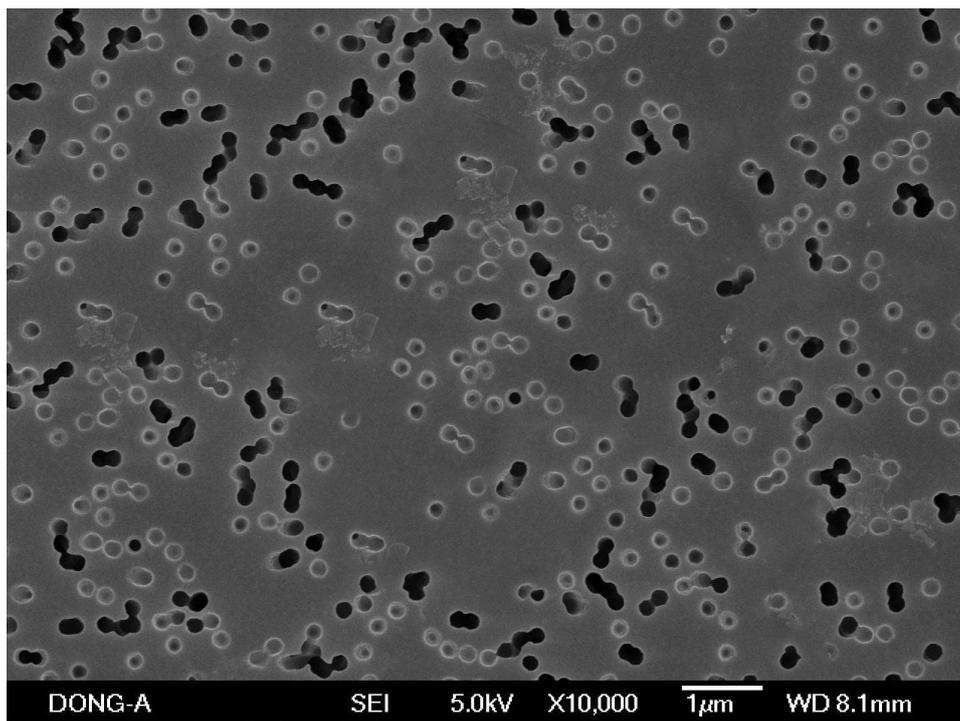


Figure S2. The representative SEM image of the undiluted MWCNT-free soluble fraction at 2.4 mg/mL. Note that the collected soluble fraction of MWCNTs showed the only pore of filter and salt crystals without any MWCNT fibers.

Table S1. The levels of selected elements (ppb) of soluble fractions of MWCNTs dispersed in ALF (pH 5.5).

Metals	Property	CNT1	CNT2	CNT3	CNT4	CNT5
Al	Other metals	12.9	11.6	112	9.49	7.14
As	Metalloids	0.1	0.1	0.1	0.1	0.1
B	Metalloids	0.105	0.099	0.082	0.082	0.087
Ba	Alkaline metals	0	0	0	0	0
Co	Transition metals	9.1	9.5	11.2	13.6	0
Cr	Transition metals	0.005	0.004	0.002	0.003	0.003
Cu	Transition metals	0.002	0.003	0.002	0.002	0.022
Fe	Transition metals	150.9	160.1	162	153.6	237
Ga	other metals	0	0.003	0	0	0
Li	Alkali metals	0.003	0.004	0	0.001	0.004
Mn	Transition metals	0	0	0	0	0
Mo	Transition metals	21.5	20.7	0.1	0.1	0.1
Ni	Transition metals	1.4	1.4	1.3	1.3	1.4
Rb	Alkali metals	0.021	0.037	0.033	0.037	0.034
Sb	Metalloids	0.009	0	0	0	0.006
Se	Nonmetals	0.021	0.008	0	0.066	0.02
Sn	other metals	0.009	0	0.006	0.003	0.007
Sr	Alkaline metals	0.011	0.013	0.011	0.013	0.012
Ti	Transition metals	0.001	0.001	0.001	0.001	0.001
W	Transition metals	0.014	0.003	0.008	0.008	0.004
Zn	Transition metals	15.7	8.3	6.9	10.3	4