

## Supporting Information

for

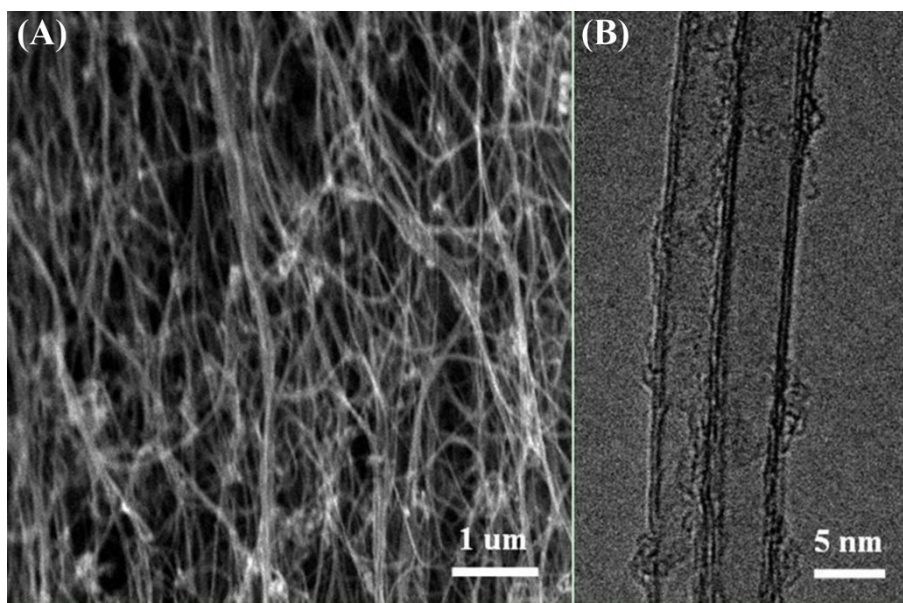
### **“Coupling carbon nanotube film microextraction with desorption corona beam ionization for rapid analysis of Sudan dyes (I–IV) and Rhodamine B in chilli oil”**

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**Figure S1.** Image of carbon nanotube film. (A) SEM, and (B) TEM. (Provided by Yijie Technologies Co., Ltd. (Shanghai, China))



**Figure S2.** Photographs of carbon nanotube film. (Provided by Yijie Technologies Co., Ltd. (Shanghai, China))

Table S1. Calibration curves, LODs and LOQs data of Sudan dyes and Rhodamine B in chilli powder.

Analytes	Linear range ( $\mu\text{g/g}$ )	Regression line			LOD (ng/g)	LOQ (ng/g)
		Slope	Intercept	$R^2$		
Sudan I	0.1-20	74949.7 ( $\pm 3611.9$ )	346512.7 ( $\pm 29407.6$ )	0.9769	5	15
Sudan II	0.1-20	834161.8 ( $\pm 48576.0$ )	42769.4 ( $\pm 395492.2$ )	0.9801	2	6
Sudan III	0.1-20	93368.9 ( $\pm 3383.0$ )	144001.0 ( $\pm 27543.5$ )	0.9667	20	60
Sudan IV	0.1-20	96365.6 ( $\pm 4271.7$ )	188703.2 ( $\pm 34779.0$ )	0.9513	20	60
Rhodamine B	0.1-20	259575.2 ( $\pm 10920.0$ )	400906.1 ( $\pm 88907.6$ )	0.9895	10	30

Table S2. Recoveries of five dyes in chilli powder sample.

Analytes	Added ( $\mu\text{g/g}$ )	Found ( $\mu\text{g/g}$ )	Recovery (%)	RSD (% , n=5)
Sudan I	0.5	0.42	84.30	19.04
	1.6	1.80	112.35	11.59
	16	17.43	108.95	14.23
Sudan II	0.5	0.45	90.63	16.03
	1.6	15.73	98.34	16.49
	16	16.87	105.46	15.08
Sudan III	0.5	0.44	87.50	16.32
	1.6	1.85	115.72	14.56
	16	16.68	104.25	16.78
Sudan IV	0.5	0.49	98.92	18.22
	1.6	1.74	108.56	13.46
	16	1.49	93.22	13.50
Rhodamine B	0.5	0.44	88.36	19.22
	1.6	1.78	111.25	14.53
	16	16.27	101.68	12.10

