Electronic Supplementary Material (ESI) for RSC Advances.

Figure Caption

Fig. S1. (a) TEM images of o-MWCNTs and (b) SEM images of CNTs-LDO-0.62.

Fig. S2. EDS mapping of (a) and (b) CNTs-LDO-1.23, (c) LDO, (D) CNTs-LDH-1.23 and (e) LDH on glass.

Fig. S3. XRD patterns of (a) CNTs-LDH and (b) CNTs-LDO..

Fig. S4. Raman spectra of (a) CNTs-LDH and (b) CNTs-LDO.

Fig. S5. TOC removal on different catalytic. Reaction conditions: $[BPA]_0$ =10 mg·L^{-1}, catalyst dosage = 0.02 g·L^{-1}, PMS dosage = 0.15 g·L^{-1} and T = 30 ^{o}C.

Table Title

Table S1 The adsorption of Co and Mn during the preparation of samples

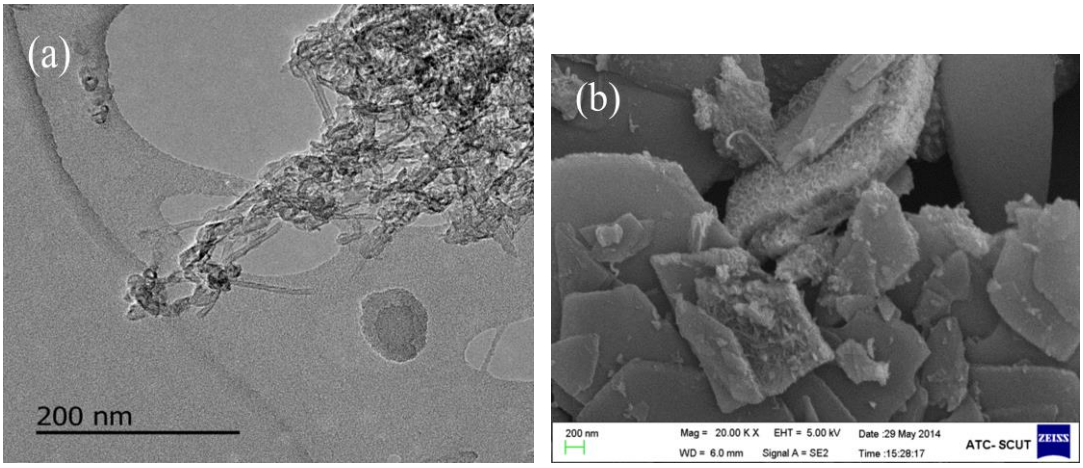
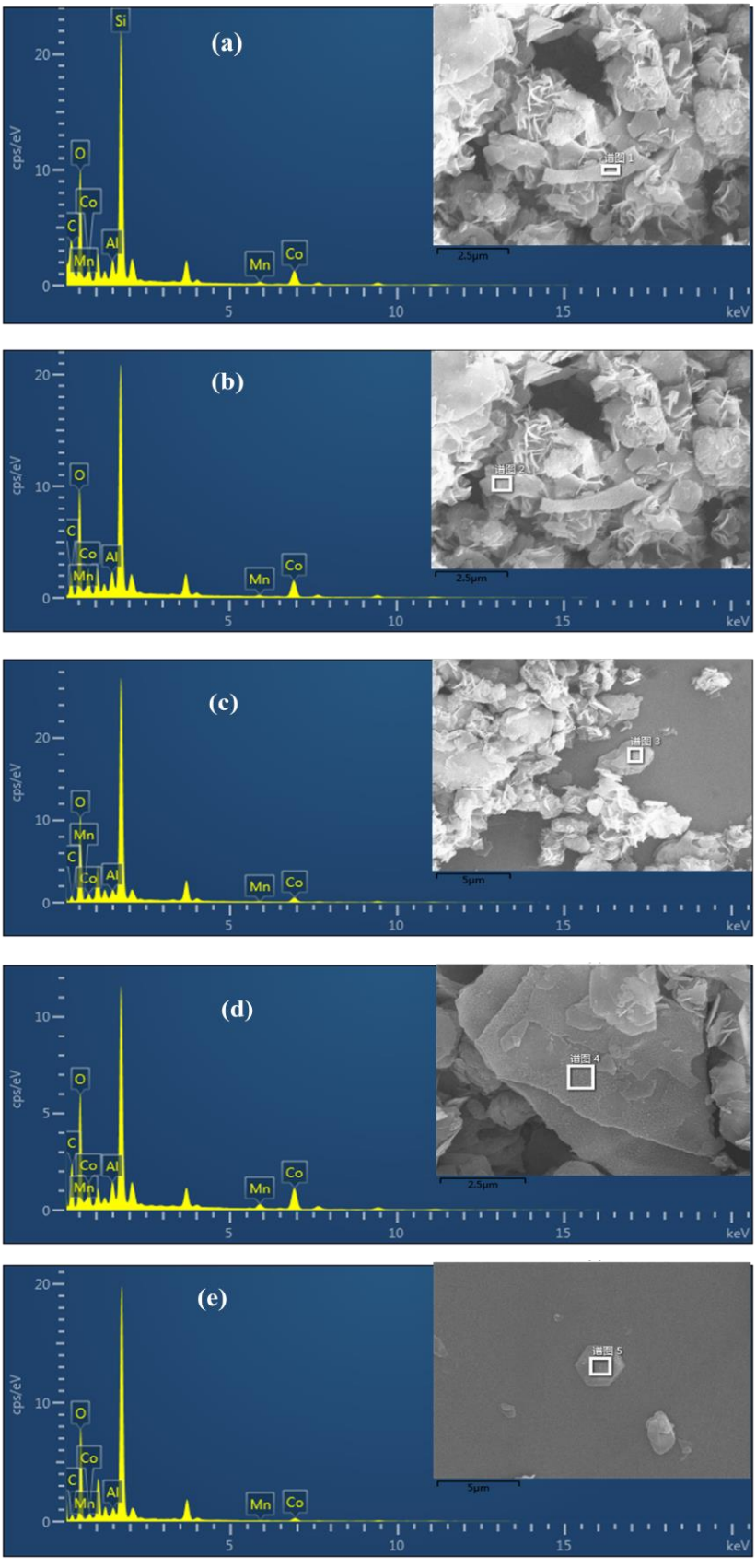


Fig. S1 (a)TEM images of o-MWCNTs and (b) SEM images of CNTs-LDO-0.62.



Element	wt%	Atomic %
C	27.02	39.53
O	38.20	41.92
Al	0.98	0.64
Si	23.85	14.91
Mn	1.66	0.53
Co	8.29	2.47
Total:	100.00	100.00

Element	wt%	Atomic %
C	26.59	38.19
O	50.48	54.38
Al	1.91	1.22
Mn	2.87	0.90
Co	18.15	5.31
Total:	100.00	100.00

Element	wt%	Atomic %
C	6.60	10.53
O	66.11	79.12
Al	3.56	2.53
Mn	4.59	1.60
Co	19.14	6.22
Total:	100.00	100.00

Element	wt%	Atomic %
C	32.79	46.10
O	43.82	46.21
Al	2.70	1.69
Mn	3.78	1.16
Co	16.91	4.84
Total:	100.00	100.00

Element	wt%	Atomic %
C	13.68	19.8
O	67.95	73.74
Al	2.80	1.8
Mn	3.32	1.05
Co	12.25	3.61
Total:	100.00	100.00

Fig. S2 EDS mapping of (a) and (b) CNTs-LDO-1.23, (c) LDO, (D) CNTs-LDH-1.23 and (e) LDH on glass.

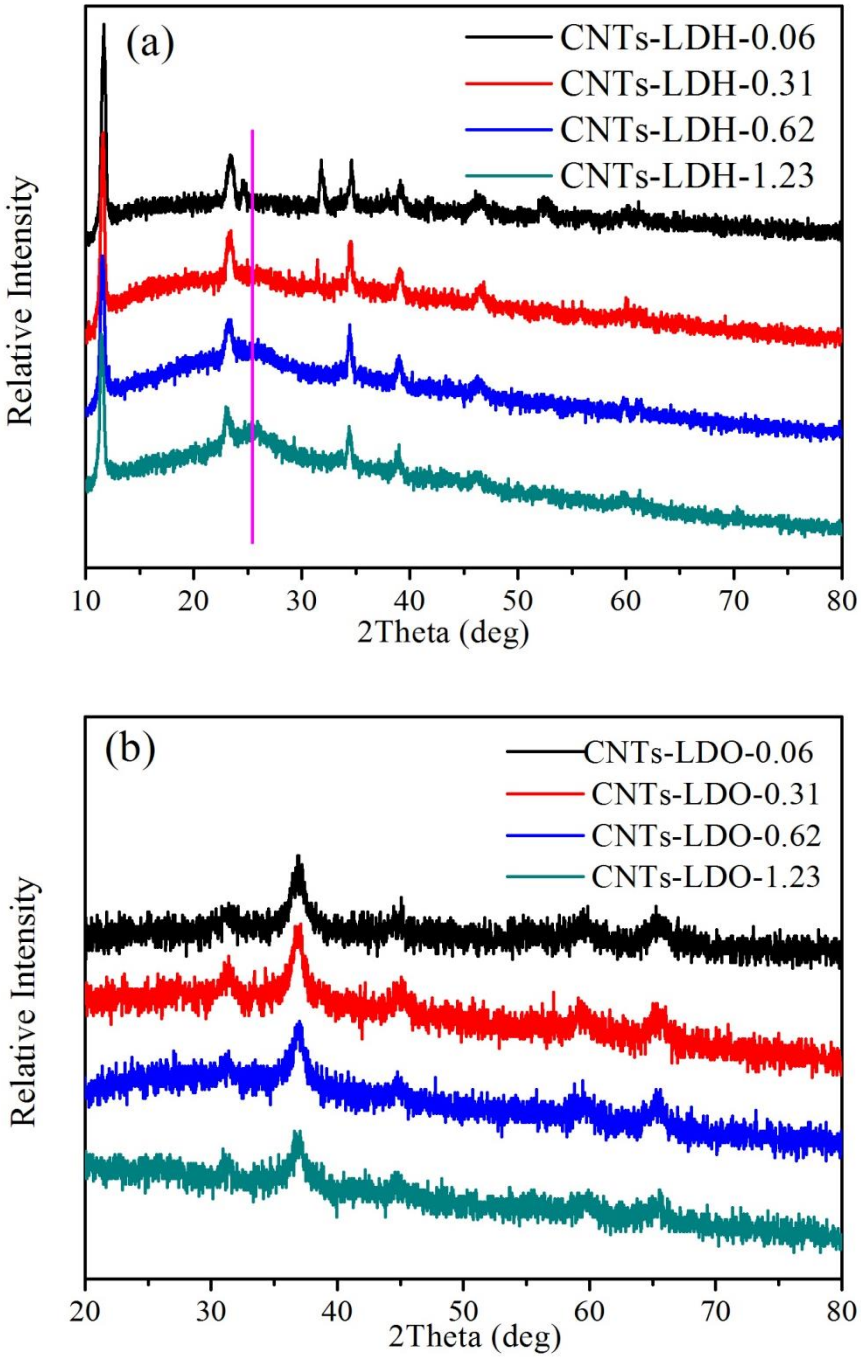


Fig. S3 XRD patterns of (a) CNTs-LDH and (b) CNTs-LDO.

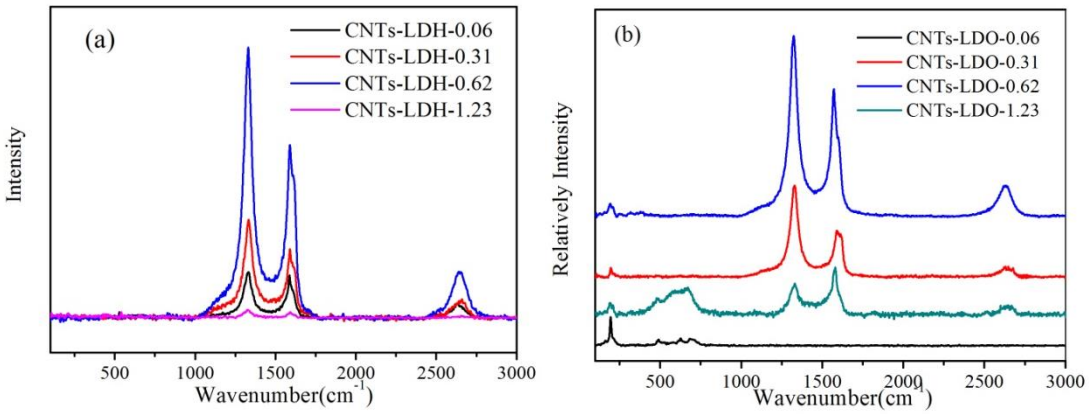


Fig.S4 Raman spectra of (a) CNTs-LDH and (b) CNTs-LDO.

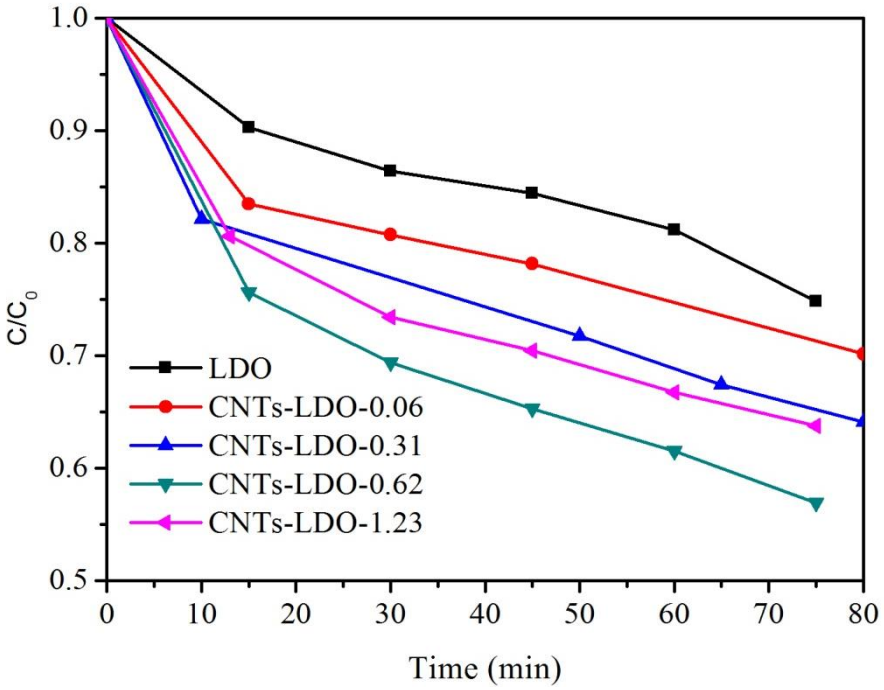


Fig. S5 TOC removal on different catalytic. Reaction conditions: $[BPA]_0$ =10 mg·L^{-1}, catalyst dosage = 0.02 g·L^{-1}, PMS dosage = 0.15 g·L^{-1} and T = 30 ^{o}C.

Table S1 The adsorption of Co and Mn during the preparation of samples

Samples	C_{Co}(mg·L^{-1})		C_{Mn}(mg·L^{-1})	
	Initial concentration	After adsorption	Initial concentration	After adsorption
CNTs-LDH-0.06	424.5 ± 6.2	404.0 ± 5.5	102.5 ± 0.7	97.6 ± 4.5
CNTs-LDH-0.31	87.0 ± 2.8	78.8 ± 3.5	20.75 ± 1.5	18.5 ± 0.6
CNTs-LDH-0.62	45.5 ± 1.5	39.7 ± 0.7	10.6 ± 0.1	8.9 ± 0.6
CNTs-LDH-1.23	23.2 ± 0.4	20.1 ± 0.5	5.17 ± 0.2	4.05 ± 0.04