

Corrigendum to “High-performance carbon nanotube field-effect transistors with electron mobility of $39.4 \text{ cm}^2\text{V}^{-1}\text{s}^{-1}$ using anion–π interaction doping” [Carbon 203 (25 January 2023) 761–769]



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There is only a few corrigendum text in table. The important things are related to corresponding author information and TOC. I attach images what should be corrected in this corrigendum word file. Please kindly confirm and correct the article.

The authors regret

One of corresponding authors information should be corrected.

High-performance carbon nanotube field-effect transistors with electron mobility of $39.4 \text{ cm}^2\text{V}^{-1}\text{s}^{-1}$ using anion–π interaction doping

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Need correction for the another corresponding author like last author

Fig. 1. The information of corresponding author Seung-Hoon Lee is not correct. Please insert the e-mail address of Seung-Hoon Lee for readers.

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TOF image change

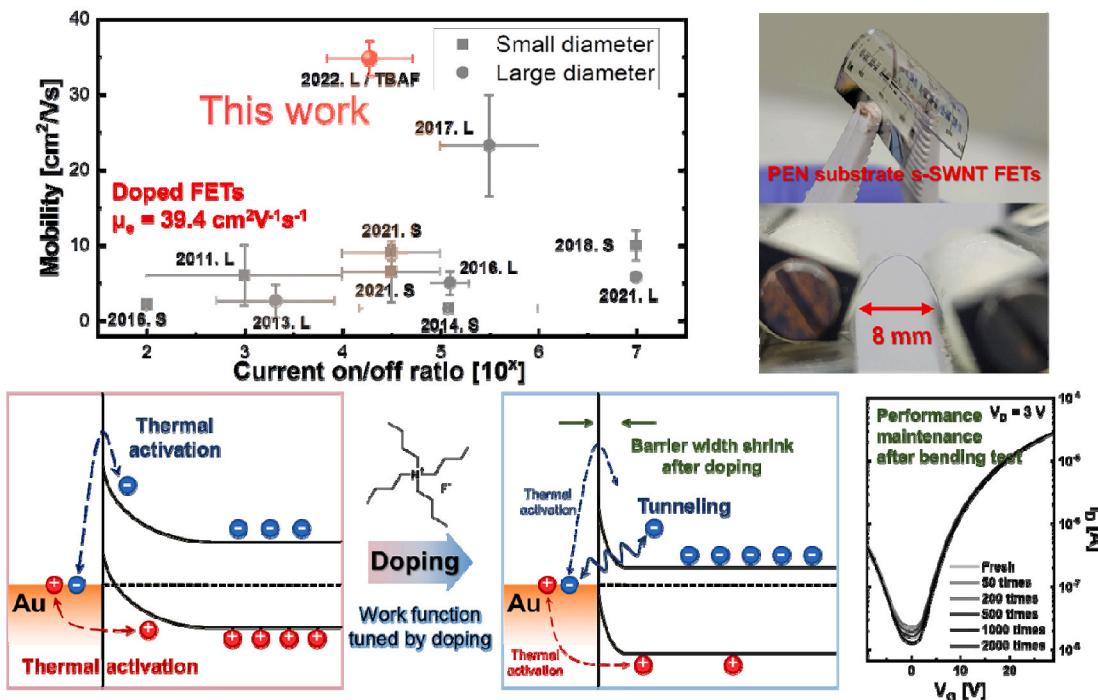


Fig. 2. Please change the TOF for clear understand of the article. I attach the file of TOC at the e-mail.

Table 1 correction

Table 1. Pristine and different concentration of n-type dopant adopted s-SWNT-FETs performance^a

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W/L = 1000/20 n-channel				p-channel			
Dopant concentration	μ_e [$\text{cm}^2\text{V}^{-1}\text{s}^{-1}$]	$V_{th,e}$ [V]	$I_{on/off}$	Dopant concentration	μ_e [$\text{cm}^2\text{V}^{-1}\text{s}^{-1}$]	$V_{th,e}$ [V]	$I_{on/off}$
Pristine	19.80 (26.02) ^b ± 4.2	10.00 (29.94) ± 3.94	1.04e+04 (43.24) ± 5.1	38.69 (40.70) ^a ± 1.36	-6.18	1.91e+04	-6.18
TBAF 0.01 mM	23.58 (29.94) ± 3.94	8.36	3.38e+05 (43.24) ± 5.1	34.74	-7.55	4.22e+05	-7.55
TBAF 0.1 mM	30.94 (39.77) ± 5.6	5.63	5.82e+05 (42.62) ± 5.64	33.85	-9.57	1.71e+06 (26.71) ± 2.12	-9.57
TBAF 0.4 mM	34.79 (39.40) ± 2.33	2.78	1.94e+04 (26.71) ± 2.12	23.68	-14.06	8.71e+04	-14.06
TBAF 1 mM	35.03 (39.91) ± 3.43	1.32	6.36e+03 (21.78) ± 1.64	18.12	-16.43	1.09e+04	-16.43
TBAF 2 mM	48.46 (51.44) ± 2.14	-	-10.35 (51.44) ± 2.14	8.06e+02 N/A	-	8.06e+02 N/A	-
TBAF 4 mM	46.57 (52.94) ± 4.27	-	-13.09 (52.94) ± 4.27	1.56e+01 N/A	-	1.56e+01 N/A	-

a

M_e : electron mobility, $V_{th,e}$: n-channel threshold voltage, $I_{on/off}$: current on/off ratio μ_e : hole mobility, $V_{th,h}$: p-channel threshold voltage. Mobility values are calculated from C_{sh} , I-V characteristics are measured at the range of ($V_D = -0.5 \text{ V}$) and ($V_G = +20 \text{ to } -30 \text{ V}$) for p-channel and ($V_D = +0.5 \text{ V}$) and ($V_G = -20 \text{ to } +30 \text{ V}$) for n-channel (9–18 devices were measured).

b

maximum value.

a

M_e : electron mobility, $V_{th,e}$: n-channel threshold voltage, $I_{on/off}$: current on/off ratio μ_e : hole mobility, $V_{th,h}$: p-channel threshold voltage. Mobility values are calculated from C_{sh} , I-V characteristics are measured at the range of ($V_D = -0.5 \text{ V}$) and ($V_G = +20 \text{ to } -30 \text{ V}$) for p-channel and ($V_D = +0.5 \text{ V}$) and ($V_G = -20 \text{ to } +30 \text{ V}$) for n-channel (9–18 devices were measured).

b

maximum value.

Fig. 3. The upper subscript of Table 1 should be corrected. Table 1 caption “^a” should be maintaining with erasing the caption “^a” in the beside of data (40.70).

Table 2 correction

Table 2. Pristine and doped s-SWNT energy level analysis^a and calculated electron density.

Dopant concentration [mM]	Work Function [eV]	ΔE_F [eV]	Electron density (nSWNT) [cm ⁻³]
Pristine	4.66	—	2.12E+16
TBAF 0.1 mM	4.57	0.09	3.20E+17
TBAF 0.4 mM	4.46	0.2	6.94E+17
TBAF 1 mM	4.37	0.29	4.93E+19
TBAF 2 mM	4.27	0.39	1.61E+21
TBAF 4 mM	3.99	0.67	7.78E+22

^a ΔE_F : Fermi level shift.

Table 2. Pristine and doped s-SWNT energy level analysis^a and calculated electron density.

The upper subscript position
should be changed

Dopant concentration [mM]	Work Function [eV]	ΔE_F^a [eV]	Electron density (nSWNT) [cm ⁻³]
Pristine	4.66	—	2.12E+16
TBAF 0.1 mM	4.57	0.09	3.20E+17
TBAF 0.4 mM	4.46	0.2	6.94E+17
TBAF 1 mM	4.37	0.29	4.93E+19
TBAF 2 mM	4.27	0.39	1.61E+21
TBAF 4 mM	3.99	0.67	7.78E+22

^a ΔE_F : Fermi level shift.

Fig. 4. The upper subscript of “^a” position is not in the caption of Table 2. “^a” should be marked beside ΔE_F .

The authors would like to apologise for any inconvenience caused.