

# Correction to “Performance Improvement with an Ultrathin p-Type Interfacial Layer in n-Type Vertical Organic Field-Effect Transistors Based on Reduced Graphene Oxide Electrode”

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## Abstract:

The obtained device exhibited a current on/off ratio of  $9.63 \times 10^5$ , which is the largest value reported for rGO-based VOFETs. The vertical electron mobility of the PTCDI-C8 layer estimated by the space-charge-limited current technique was  $1.14 \times 10^{-3} \text{ cm}^2/(\text{V s})$ . However, it was not the main limiting factor for the current density in this device.

Right column in p. 24469, right column in p. 24470, right column in p. 24471:

current on/off ratio of  $9.63 \times 10^5$

Right column in p. 24470, left column in p. 24471, left column in p. 24472:

$0.74 \text{ mA/cm}^2$

Right column in p. 24472:

The same device performance was almost stable for different batches and different spatial locations because the same fabrication parameters such as deposition rate, vacuum pressure, and testing conditions were strictly kept.

Right column in p. 24472:

The error (standard deviation value) of the on-current density and  $V_{\text{th}}$  of 3 devices was calculated and is presented in Table 1.

Right column in p. 24472:

$\pm 0.035$  and  $0.031 \text{ mA/cm}^2$

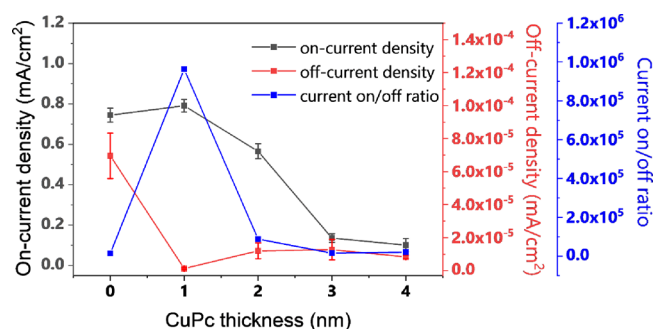
Corrected Table 1 and Figure 3.

## ASSOCIATED CONTENT

### Supporting Information

The Supporting Information is available free of charge at <https://pubs.acs.org/doi/10.1021/acsomega.3c08085>.

Corrected Supporting Information: electrical properties (Tables S1 and S2) (PDF)



**Figure 3.** On-current density, off-current density, and current on/off ratio of the devices with different thicknesses of the CuPc interfacial layer at  $V_{\text{D}} = +5 \text{ V}$ . Current densities are average ( $\pm$ standard deviation) of 3 devices.

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**Table 1. Electrical Properties of the Normal rGO-VOFETs and pn-rGO-VOFETs at  $V_D = +5$  V**

device	on-current density <sup>a</sup> (mA/cm <sup>2</sup> )	off-current density (mA/cm <sup>2</sup> )	on/off ratio <sup>a</sup>	$V_{th}$ <sup>a</sup> (V)
rGO-VOFETs	0.74 ( $\pm 0.035$ )	$5.02 \times 10^{-5}$	$1.44 \times 10^4$	-28 ( $\pm 1.24$ )
pn-rGO-VOFETs	0.79 ( $\pm 0.031$ )	$8.20 \times 10^{-7}$	$9.63 \times 10^5$	-3 ( $\pm 1.31$ )

<sup>a</sup>Average ( $\pm$ standard deviation) of 3 devices.