

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0213323 A1

Jun. 27, 2024 (43) **Pub. Date:**

(54) SINGLE-TRANSISTOR STRUCTURE, MULTI-TRANSISTOR STRUCTURE, AND **ELECTRONIC APPARATUS**

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18/555,871 (21) Appl. No.:

PCT Filed: Feb. 8, 2022

(86) PCT No.: PCT/CN2022/075442

§ 371 (c)(1),

(2) Date: Oct. 18, 2023

(30)Foreign Application Priority Data

(CN) 202110418615.6

Publication Classification

(51) Int. Cl.

H01L 29/10 (2006.01)H01L 29/423 (2006.01)H01L 29/78 (2006.01)

(52) U.S. Cl.

CPC H01L 29/1033 (2013.01); H01L 29/42376 (2013.01); H01L 29/785 (2013.01)

(57) **ABSTRACT**

A single-transistor structure, a multi-transistor structure, and an electronic device. The single-transistor structure includes: a substrate; a channel, a source, and a drain, which are located at a same side of the substrate, where the channel has a first end and a second end opposite to each other along an extension direction, the source and the drain are in electrical contact with the first end and the second end, respectively; a gate disposed between the source and the drain, where the gate covers a part of the channel, and an insulating layer is sandwiched between the channel and the gate; and a channel electrode in electrical contact with another part of the channel which is exposed from the gate, the channel electrode and the part of the channel wrapped by the gate overlap partially along the extension direction, and the channel electrode is isolated and insulated from the gate.

