

ABSTRACT

A structure for a TFT array substrate is provided, that can be produced using only two or three photomasks. This can be achieved with a TFT array substrate including pixel electrodes (14') and TFTs (16) including
5 a silicon semiconductor film deposited over the insulating substrate (1), a gate insulator film (4') formed over a channel region of the silicon semiconductor film, a gate electrode (5') formed over the gate insulator film (4'), a gate electrode metal-oxide film (7) covering a surface of the gate electrode (5'), a source electrode (12) covering at least a lateral surface of the
10 gate electrode metal-oxide film (7) on the source region side and a source region, and a drain electrode (13) formed covering at least a lateral surface on the drain region side of the gate electrode metal-oxide film (7) and a drain region, the source electrode (12) and the drain electrode (13) being
15 separated from one another at an upper surface of the gate electrode metal-oxide film (7).