

# Development of Flexible OLED Display

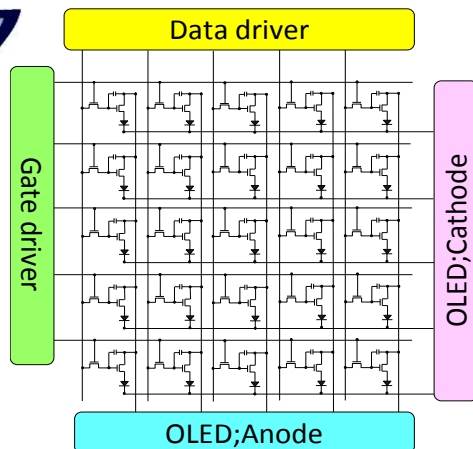
Associate Professor Makoto Mizukami

## 【Flexible OLED Display】

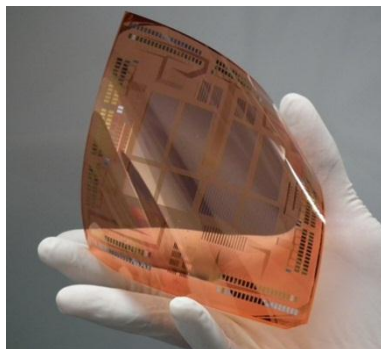
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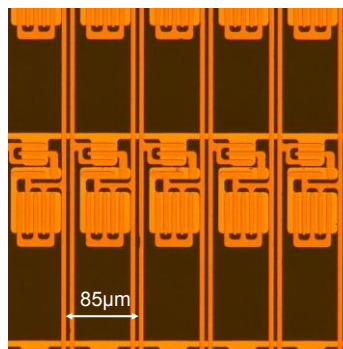
AM Circuit



Backplane



100ppi



Flexible displays have attracted attention as a new concept in displays, as they are thinner, light like paper, bendable, and mechanically robust. Among the various types of flexible display, we are developing a flexible organic light-emitting diode (OLED) display driven by organic TFTs (OTFTs) on a plastic substrate. Our target is to develop a 4 inch backplane with a pixel resolution of 100 ppi. To drive the OLED display requires OTFTs with higher performance than those required for other displays.

We will achieve this high performance by investigating organic semiconductor materials, gate insulator materials, device compositions and other aspects. As another key development focus for a backplane, we must ensure not only the performance of the individual transistors, but also work to control variation among several hundred thousand individual units, and to secure reliable performance. We are also developing a backplane using an all-printed process.

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Research Interest : Flexible device

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