

# LabNotebook

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## 1 Objectives

The objective for our group this day was to begin creating two different transistors - two PQT-12 transistors and two ZTO transistors.

## 2 Setup

Different students were available for this lab which worked in Professor Katz's lab. They were available to guide us. Carbon paint was also prepared to use to pain the electrodes.

### 2.1 Materials

The two materials we used for our transistors were PQT-12 and ZTO. The class of transistor these materials make is that of a MOSFET. We had silicon squares prepared as a semiconductor.

### 2.2 Tools

There was a spin coating machine available, as well as a hot plate.

## 3 Procedure

We practiced drawing carbon paint electrodes on a glass slide before painting two of our silicon squares. We then drew a box around the middle before drip coating the surface with PQT-12. It was placed on a hot plate to dry. For the ZTO transistor, we spin coated each silicon square with ZTO and then cleaned up the edges with 2-methoxyethanol. We then put it in a furnace.

## 4 Results

This lab resulted in 4 prepared transistors.

## 5 Observations

The process of making the transistors was actually simpler than I predicted. This is because the procedure was so well documented.