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# CSAR 62 Spin Curve

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# CSAR 62 Spin Curve

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**Disciplines**
Electronic Devices and Semiconductor Manufacturing | Nanotechnology Fabrication

**Goal:**

This report documents the spin curves for CSAR 62 electron beam lithography resist from AllResist. The aim is to provide a self-generated spin curve for CSAR 62.

**Materials:**

- CSAR 62 from AllResist (www.allresist.com)
- Anisole
- Si wafers
- Two 80mL beakers
- One amber bottle

**Equipment:**

- ReynoldsTech Spinner
- Torrey Pines Scientific Hotplate
- Filmetrics F50
- Digital Scale to measure dilutions

**Protocol:**

Coat

1. Mount wafer and ensure that it is centered.
2. Spin wafer at a fixed RPM for 60 seconds.

Soft Bake

1. Bake wafer at 180 °C for 90 seconds and allow wafer to cool after removal.

Measurement

1. Allow the Filmetrics F50 light to warm up for at least 5 minutes.
2. Click *Baseline…* to calibrate the tool using the $SiO_2$ and Si standards.
3. Mount wafer and select the *CSAR on Si* recipe.
4. Edit the recipe so that 85 points are measured on the wafer with a 1 cm edge exclusion.
5. Click *Start* to measure the resist thickness of each wafer.

**Results:**

| RPMs | Resist Thickness (nm) |
|---|---|
| 1000 | 386.3 |
| 2000 | 278.6 |
| 3000 | 229.7 |
| 4000 | 201.4 |
| 5000 | 177.1 |
| 6000 | 161.6 |