



12-21-2018

## CSAR 62 Spin Curve

Mohsen Azadi

*Singh Center for Nanotechnology*, [azadi@seas.upenn.edu](mailto:azadi@seas.upenn.edu)

Georgia Griggs

*Singh Center for Nanotechnology*, [ggriggs@seas.upenn.edu](mailto:ggriggs@seas.upenn.edu)


Glen de Villafranca

*Singh Center for Nanotechnology*, [devilla@seas.upenn.edu](mailto:devilla@seas.upenn.edu)

Gerald Lopez

*Singh Center for Nanotechnology*, [lopezg@seas.upenn.edu](mailto:lopezg@seas.upenn.edu)

Follow this and additional works at: [https://repository.upenn.edu/scn\\_protocols](https://repository.upenn.edu/scn_protocols)

 Part of the [Electronic Devices and Semiconductor Manufacturing Commons](#), and the [Nanotechnology Fabrication Commons](#)

Azadi, Mohsen; Griggs, Georgia; de Villafranca, Glen; and Lopez, Gerald, "CSAR 62 Spin Curve", *Protocols and Reports*. Paper 48.  
[https://repository.upenn.edu/scn\\_protocols/48](https://repository.upenn.edu/scn_protocols/48)

This paper is posted at Scholarly Commons. [https://repository.upenn.edu/scn\\_protocols/48](https://repository.upenn.edu/scn_protocols/48)  
For more information, please contact [repository@pobox.upenn.edu](mailto:repository@pobox.upenn.edu).

---

# CSAR 62 Spin Curve

## **Keywords**

CSAR, CSAR 62, Spin Curve, Curve, Spin

## **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<sub>2</sub> 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

