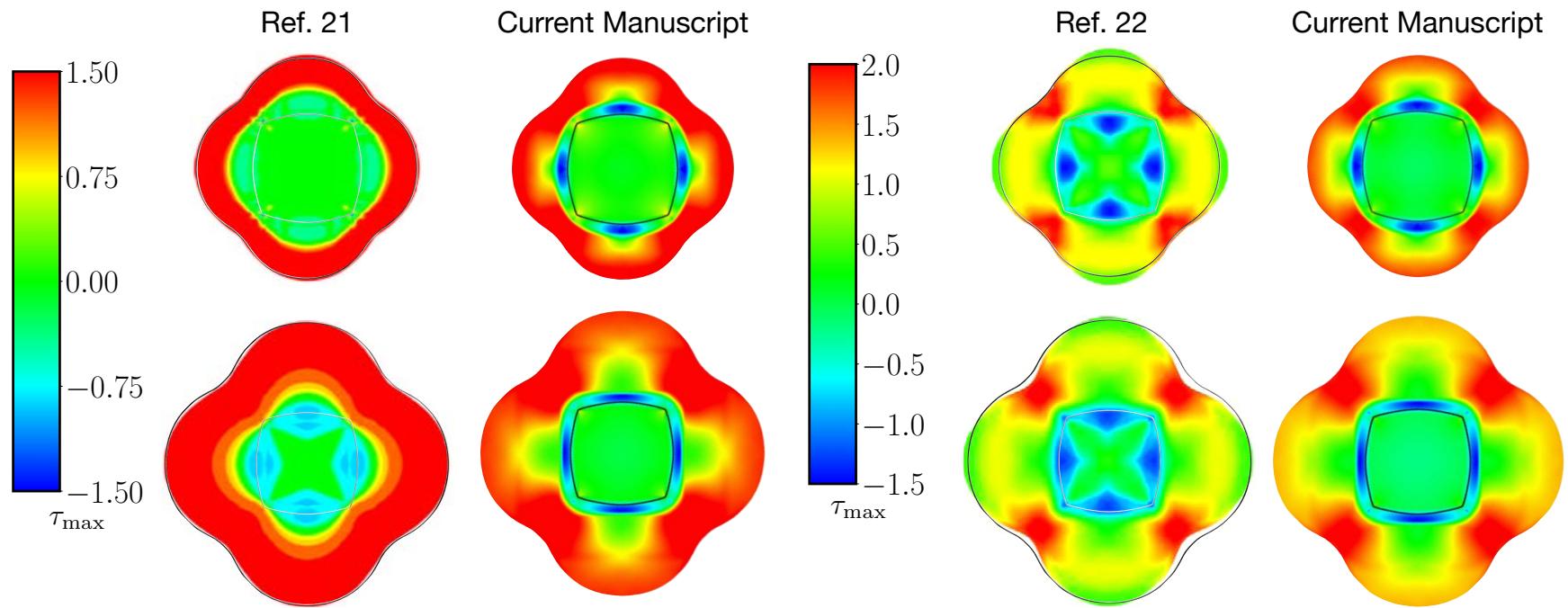


# Verification!

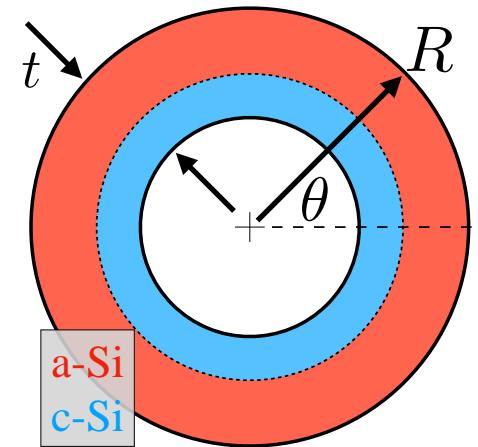
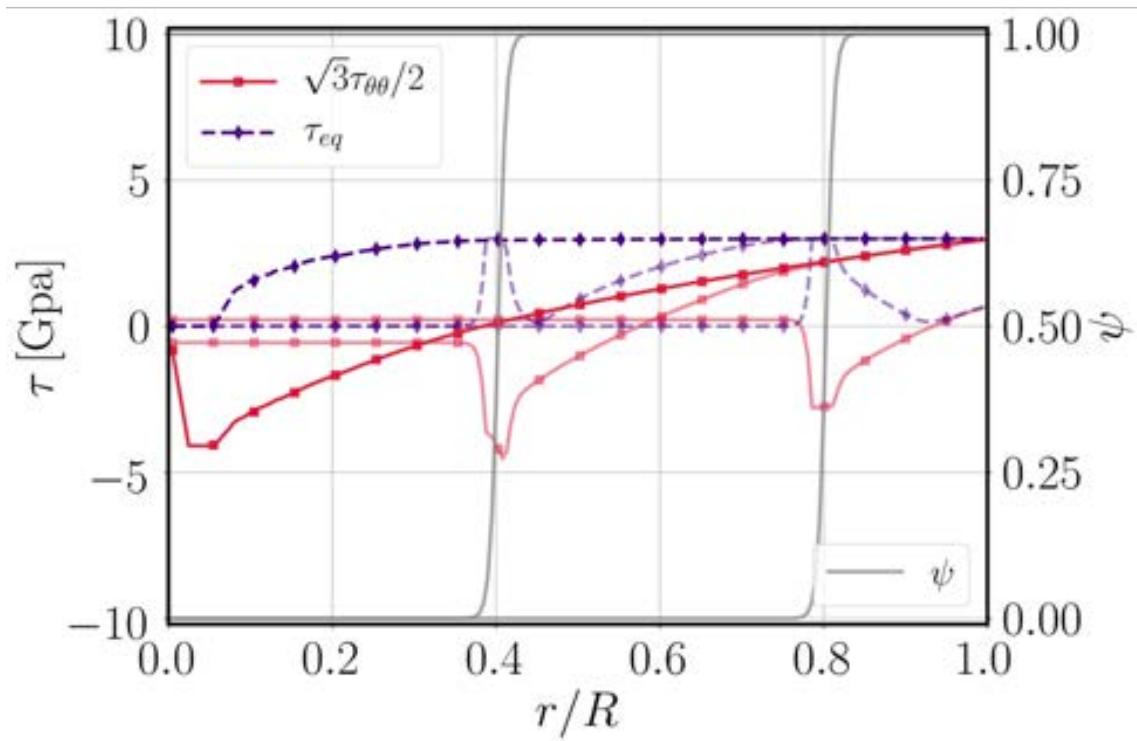


[21] Yang, H. et al. Orientation-dependent interfacial mobility governs the anisotropic swelling in lithiated silicon nanowires. Nano lett. 12, 1953–1958 (2012).

[22] Yang, H. et al. A chemo-mechanical model of lithiation in silicon. J. Mech. Phys. Solids 70, 349–361 (2014).

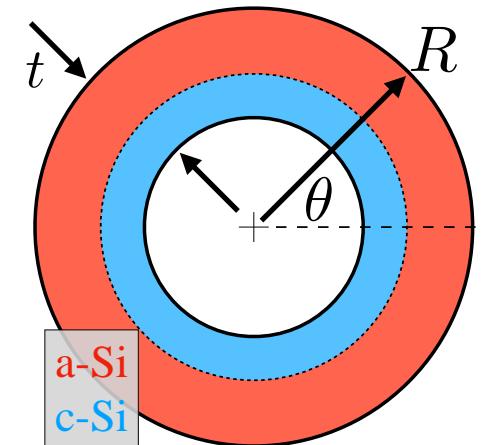
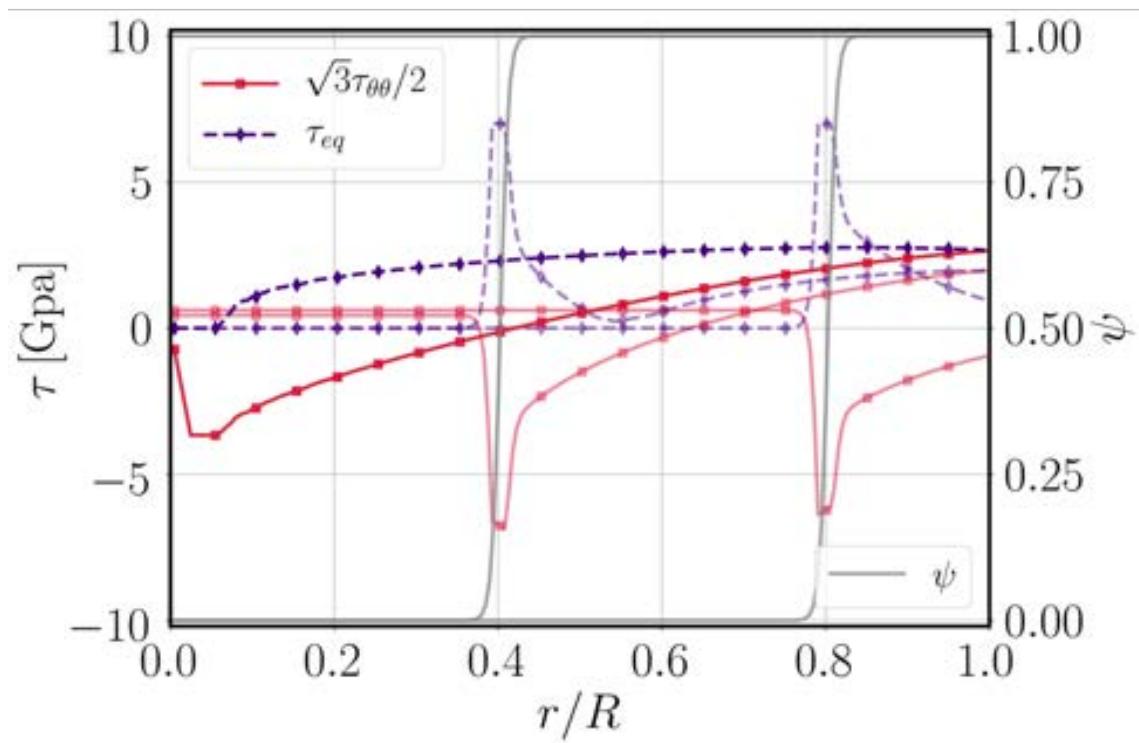
# 1D Axisymmetric Model

$$\sigma_y = 3 \text{ Gpa}$$

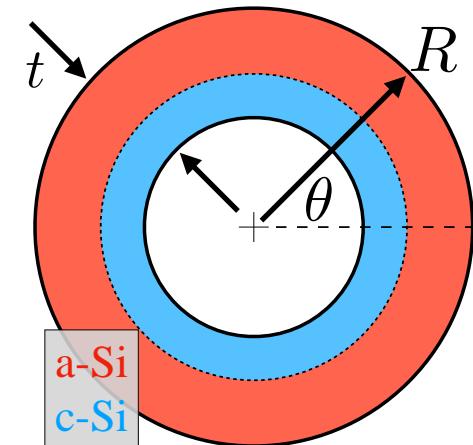
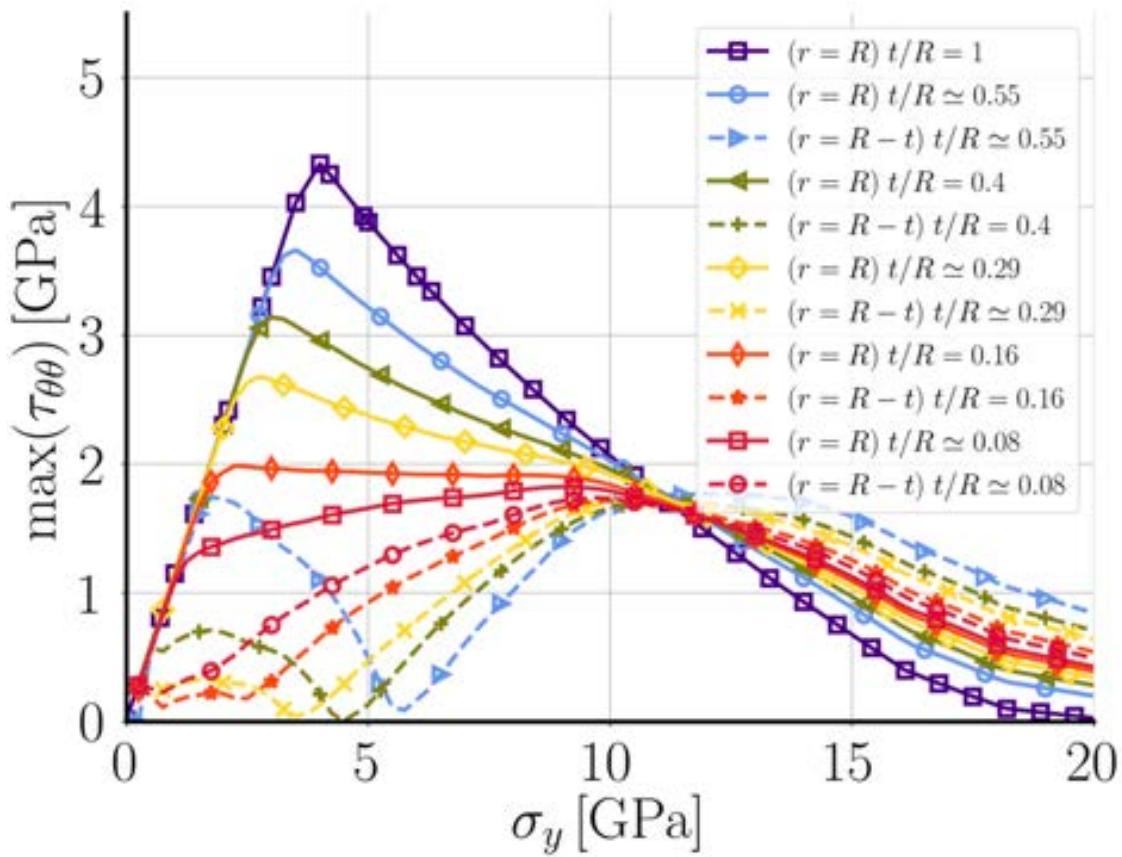


# 1D Axisymmetric Model

$$\sigma_y = 7 \text{ Gpa}$$

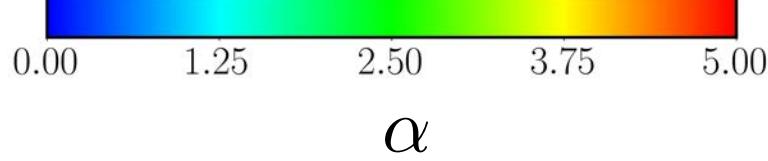
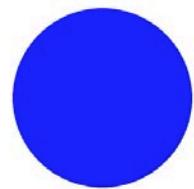
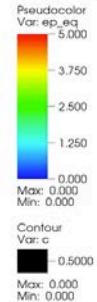


# 1D Axisymmetric Model

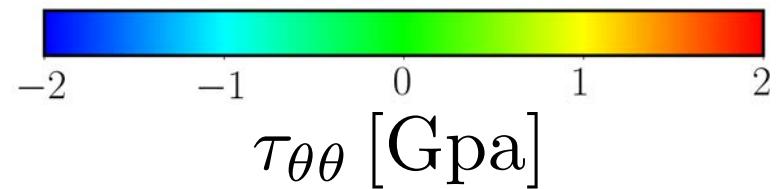
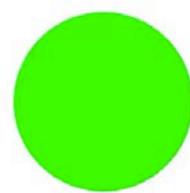
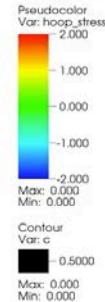


# Adding Anisotropy $\sigma_y = 1 \text{ Gpa}$

DB: 2907237.exo  
Time:0



DB: 2907237.exo  
Time:0



# Maximum Hoop Stress in 2D

