Sol-gel ZrO_2 film optimization

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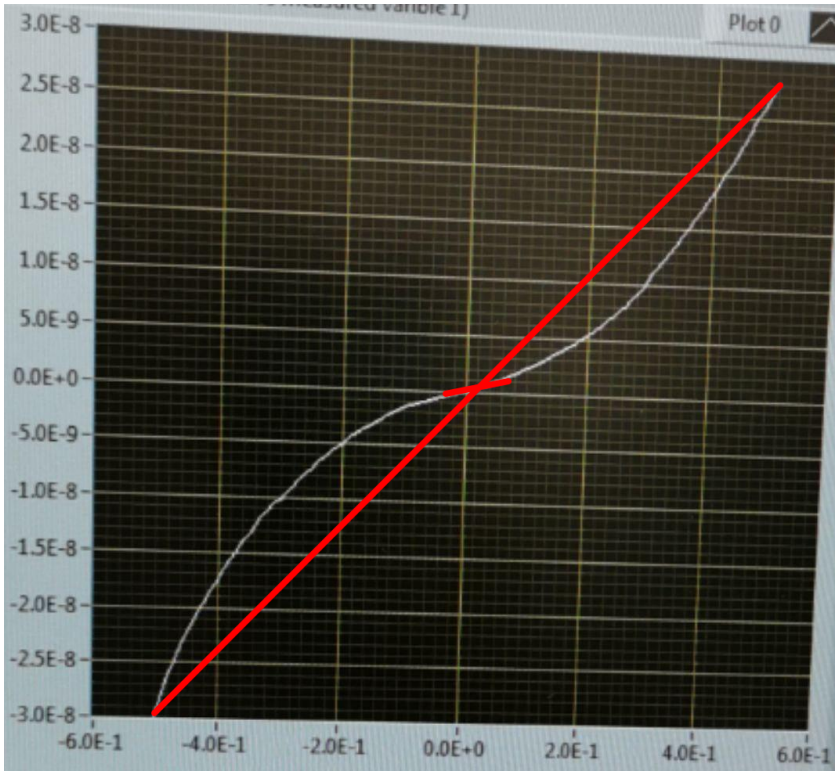
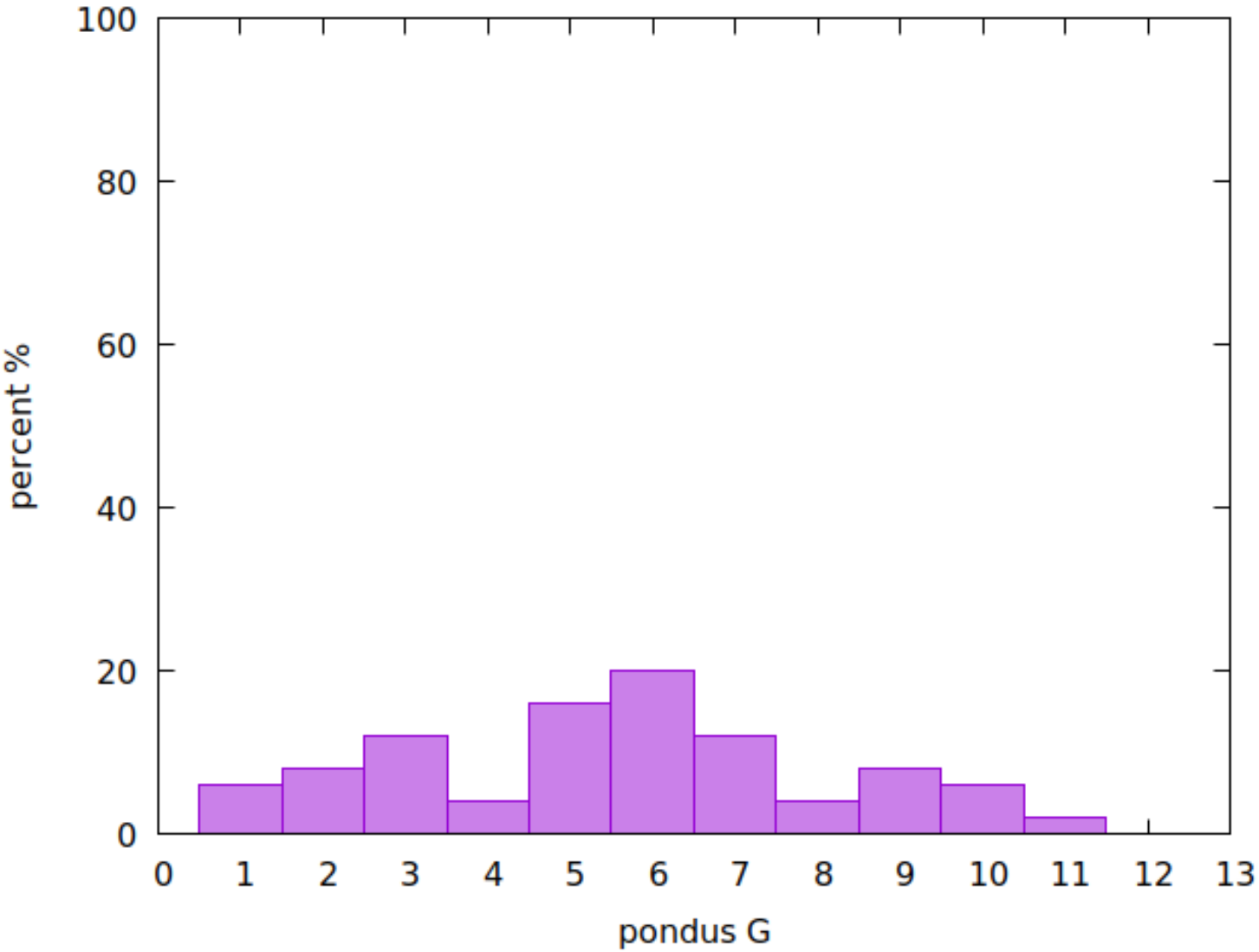
Calculation

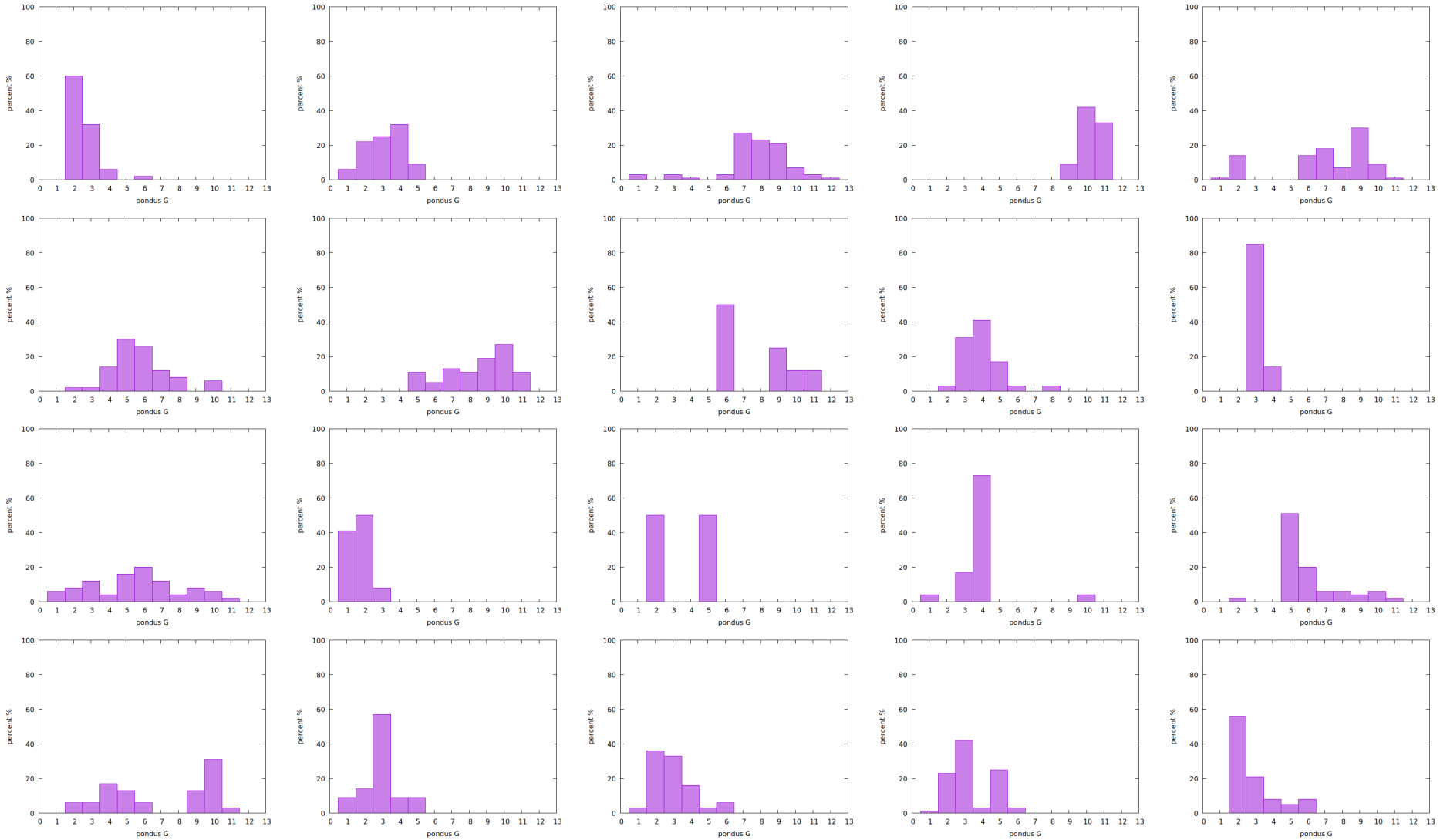


- $G = \frac{dI}{dV} = 4.234E\text{-}6$
- G' = log(|G|) = -5.37
- pG = -log(|G|) = 5.37
  pondus,power,potential
- Q: which points best for dV
- min max overestimation ?
- average ?

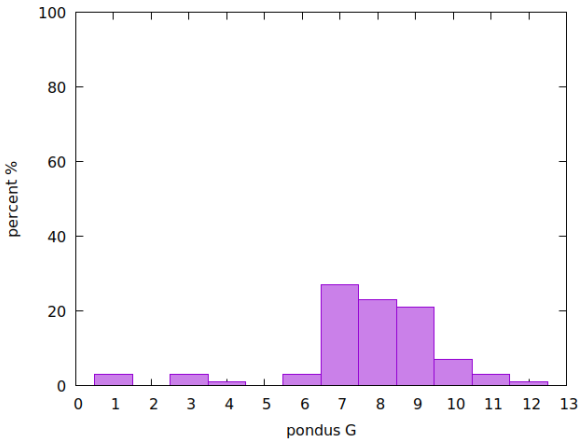
Statistics



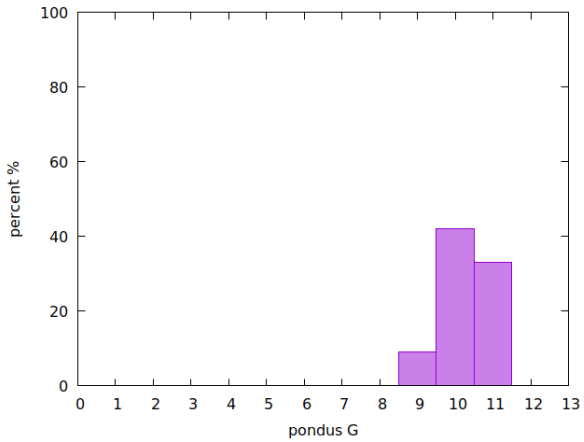
Statistics



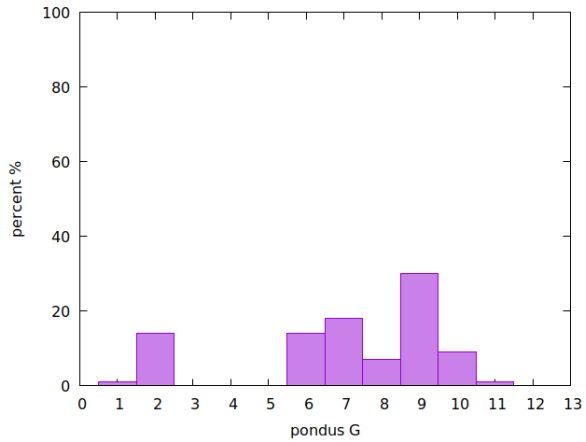
Best of



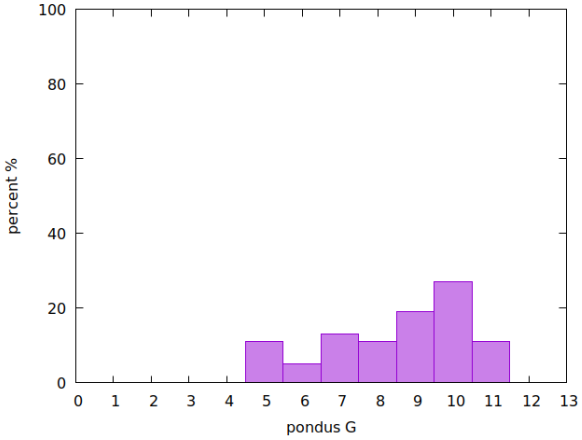
(a) 146, 10x1F HG



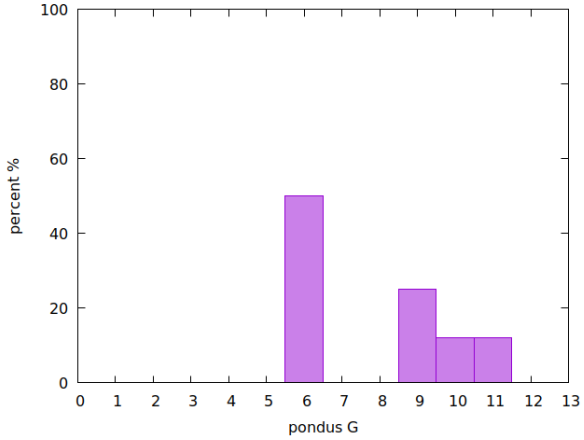
(b) 150, 5x2F HG



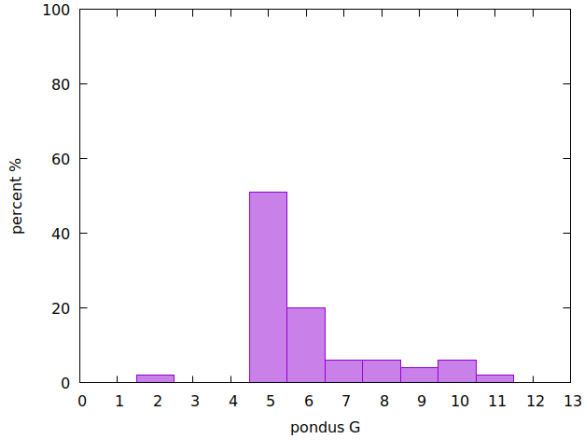
(c) 151, 2x2F HG



(d) 153, 3x4F HG



(e) 154, 3x4F HG



(f) 187, 10x1F 5mm/s

Optimazation parameters

- min (average of G)
- min (number of hole)
- min (layers)
- min (calcination temperature)?
- max (DB velocity)?
- max (heating rate)?

Optimization meta

- starting population 10 s
- extra entities/experiments per timestep =5 e
- 5 time steps
- 1*10+(5-1)*5 = 10+4*5 = 10+20 = 30
- 20-30 extra samples for comparison
- approx 2-3 hours per sample

All questions

- where should be threshold be for holes?
- how to calculate derivative?
- boundaries for Tcal = [300:500] [400:500] °C
- layers = [6:14] [4:10]
- conc = [2:5] [1:5]
- vDoc = [10:20] mm/s
- TDOC = [40:80] °C
- vCal = [2:16] °C/min
- extra steel foil