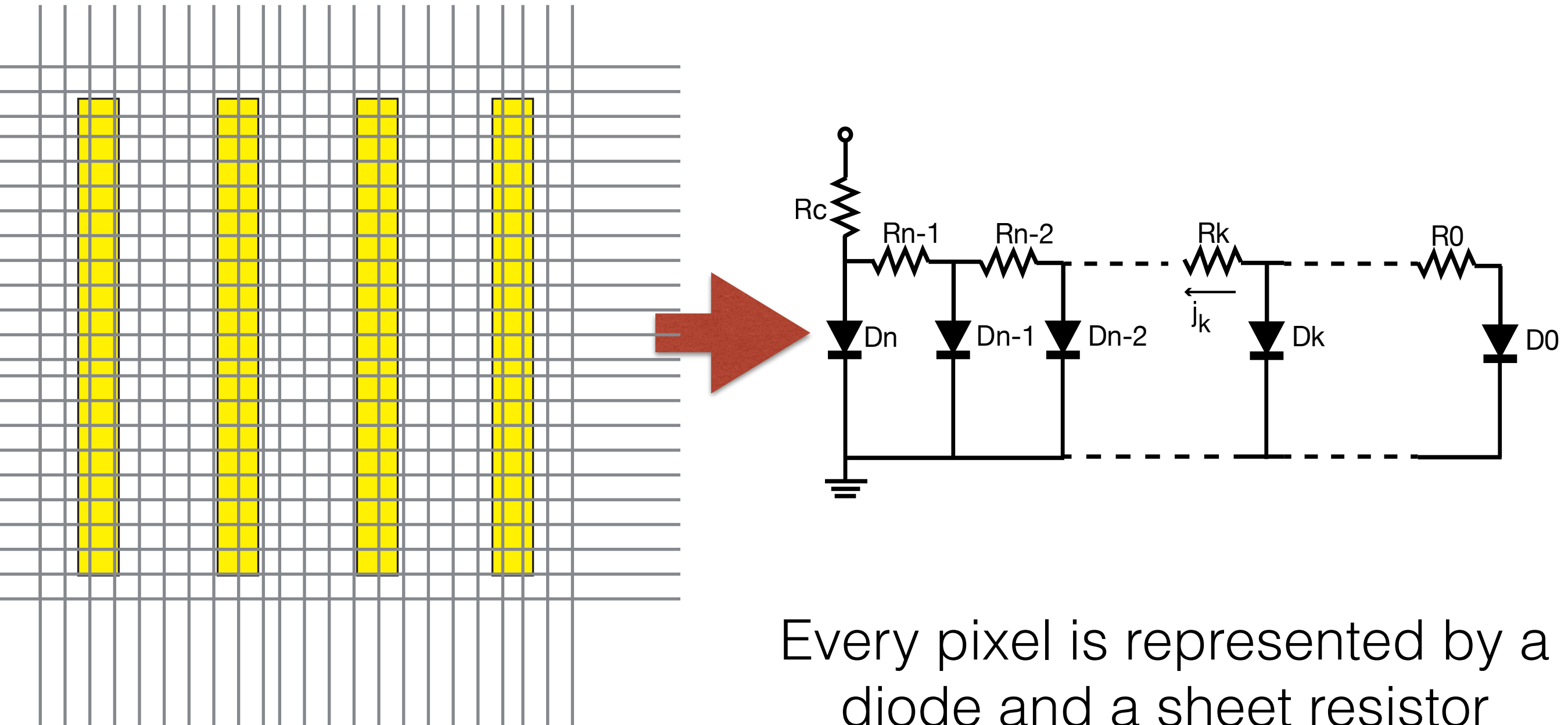


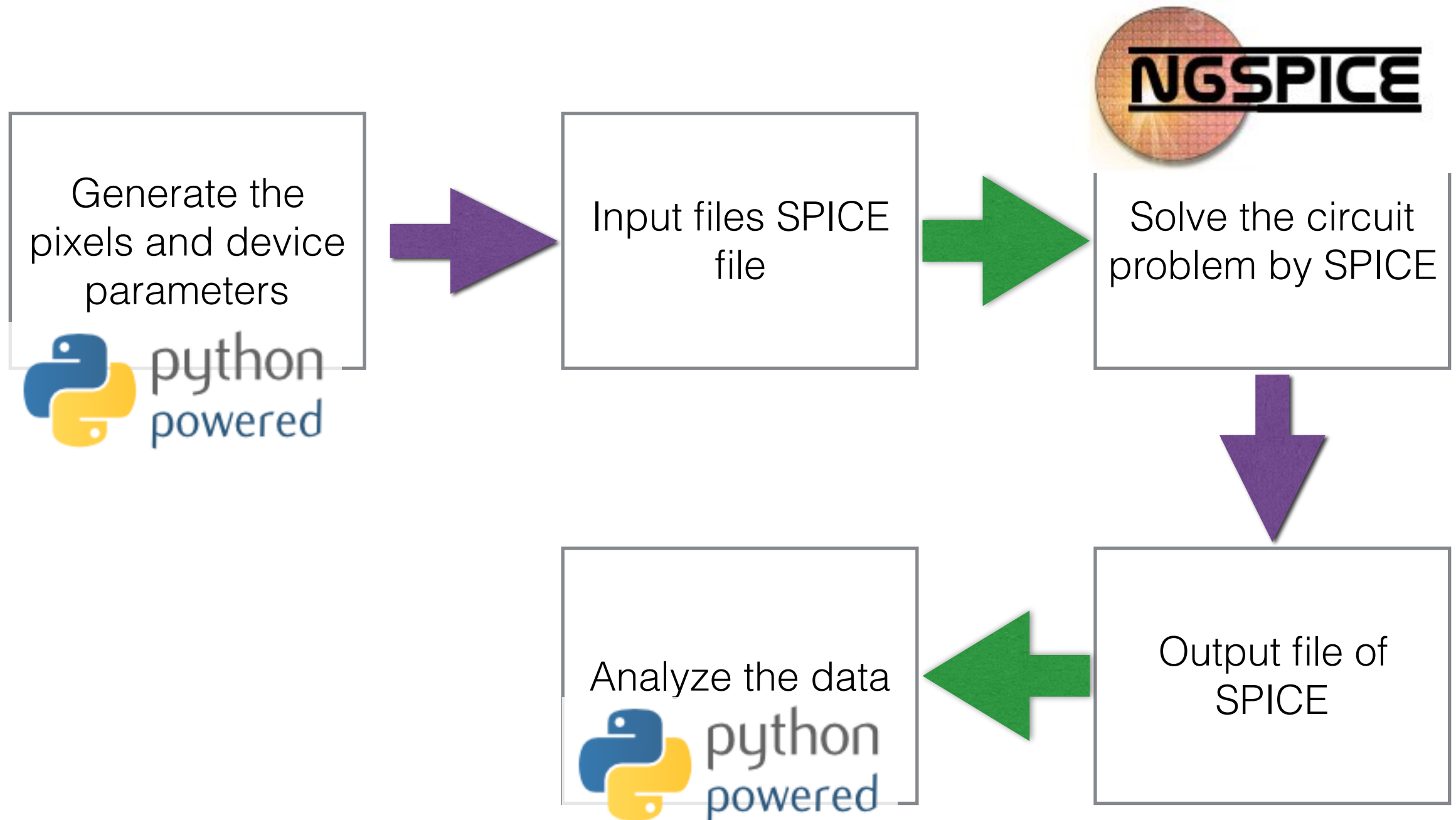
# Equivalent circuit network model



Every pixel is represented by a diode and a sheet resistor

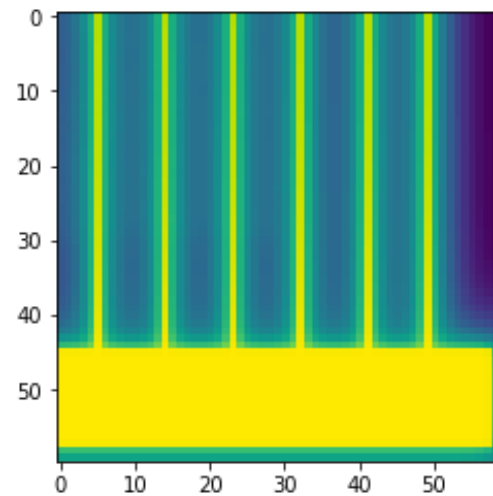
Cut the solar cell into pixels

# Flow of simulation



# Example

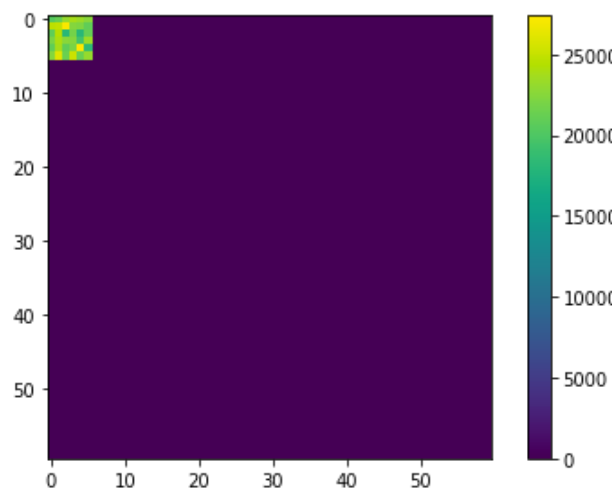
metal contact



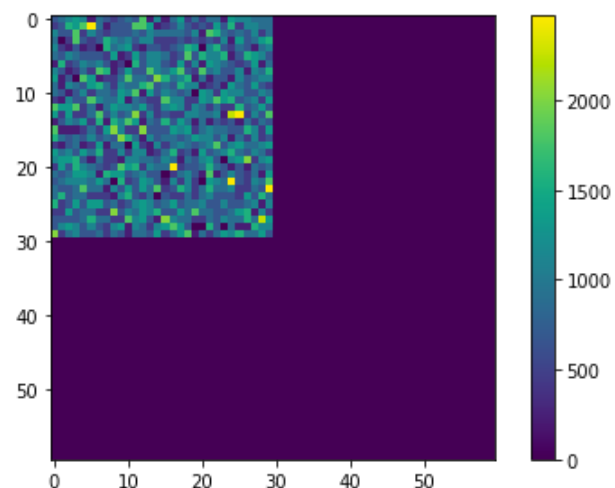
The solar cell is 1J GaAs

illumination enclosed in x% of the area  
(total illumination energy is constant)

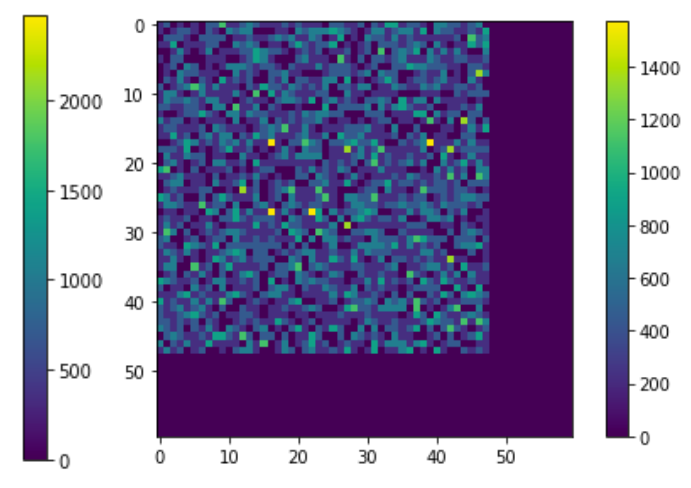
x=1%



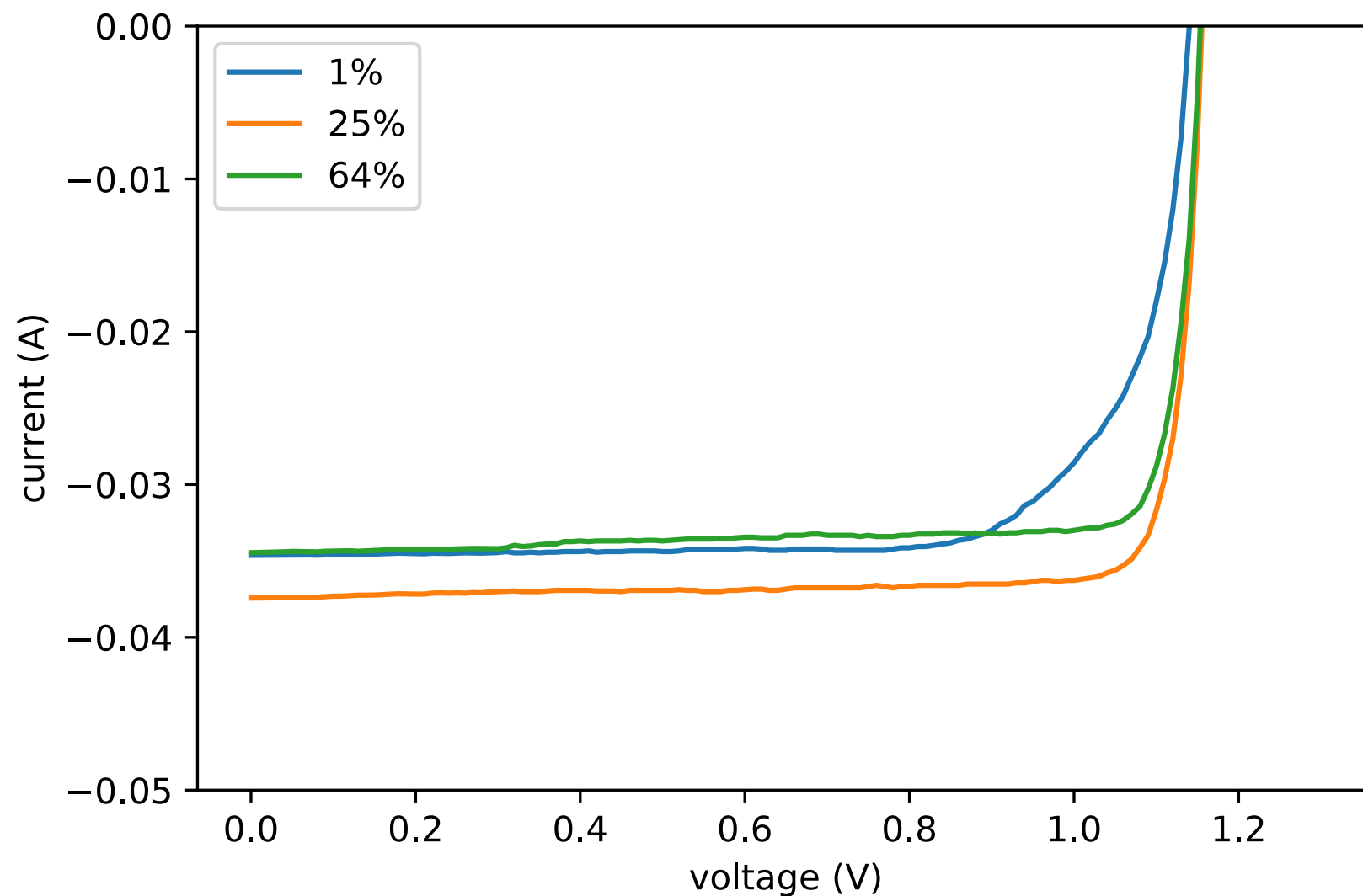
x=25%



x=64%



# Simulated result



1. Difference in  $I_{sc}$  is caused by the ratio of metal coverage
2. Nonuniform illumination decreases the fill factor