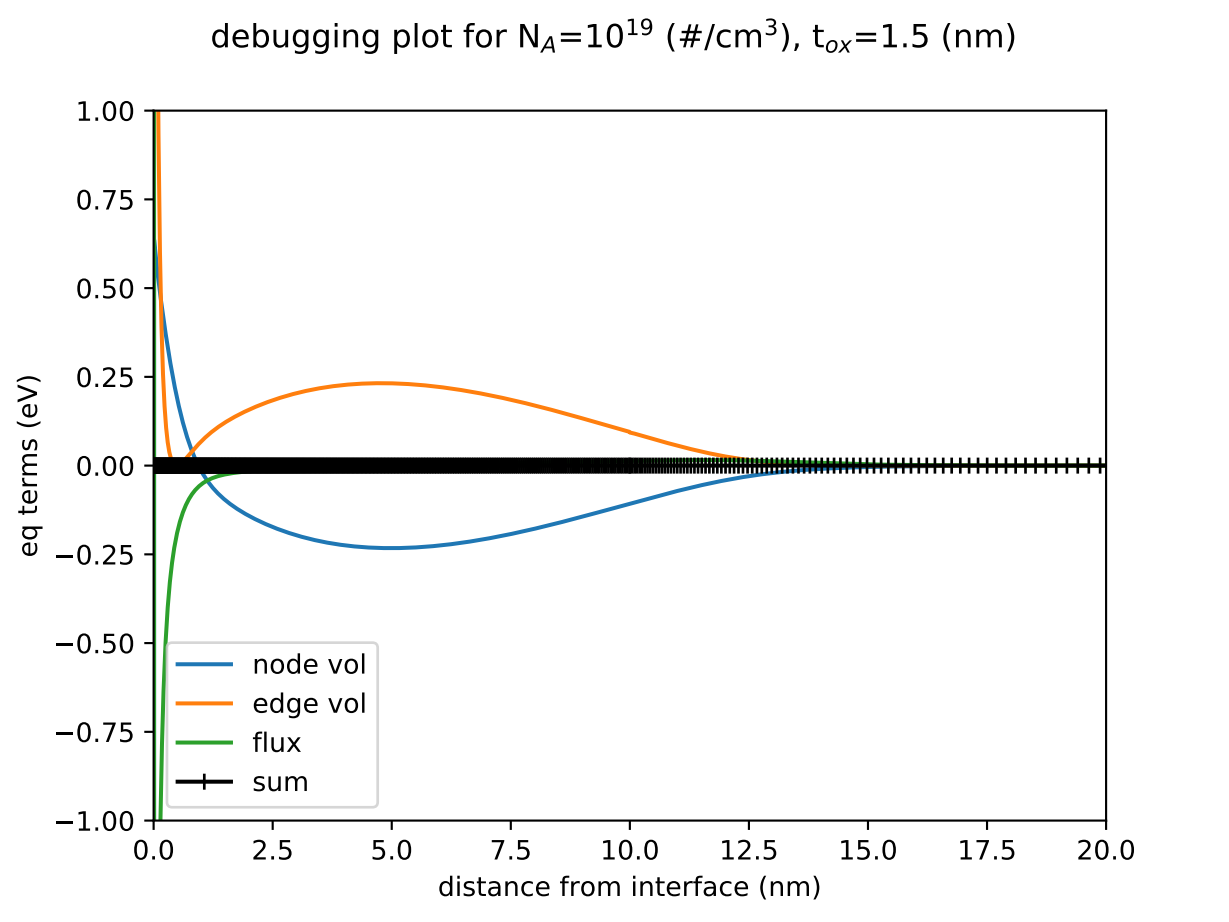
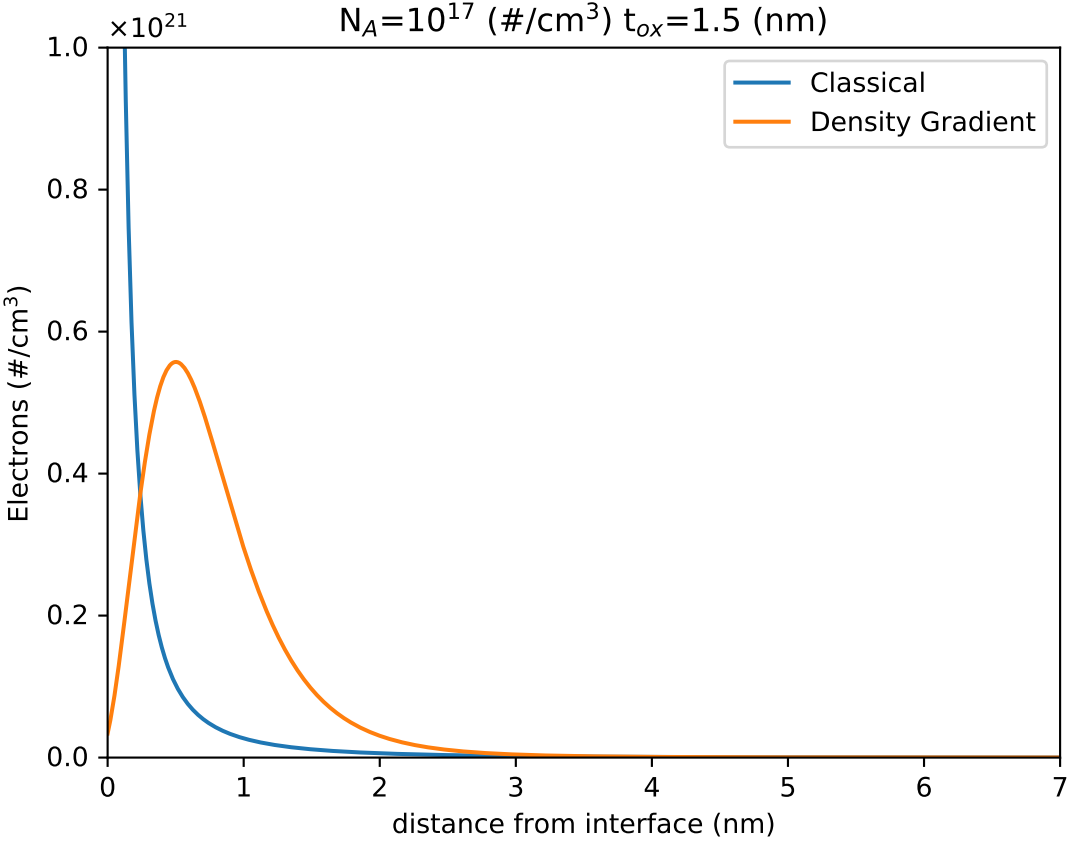
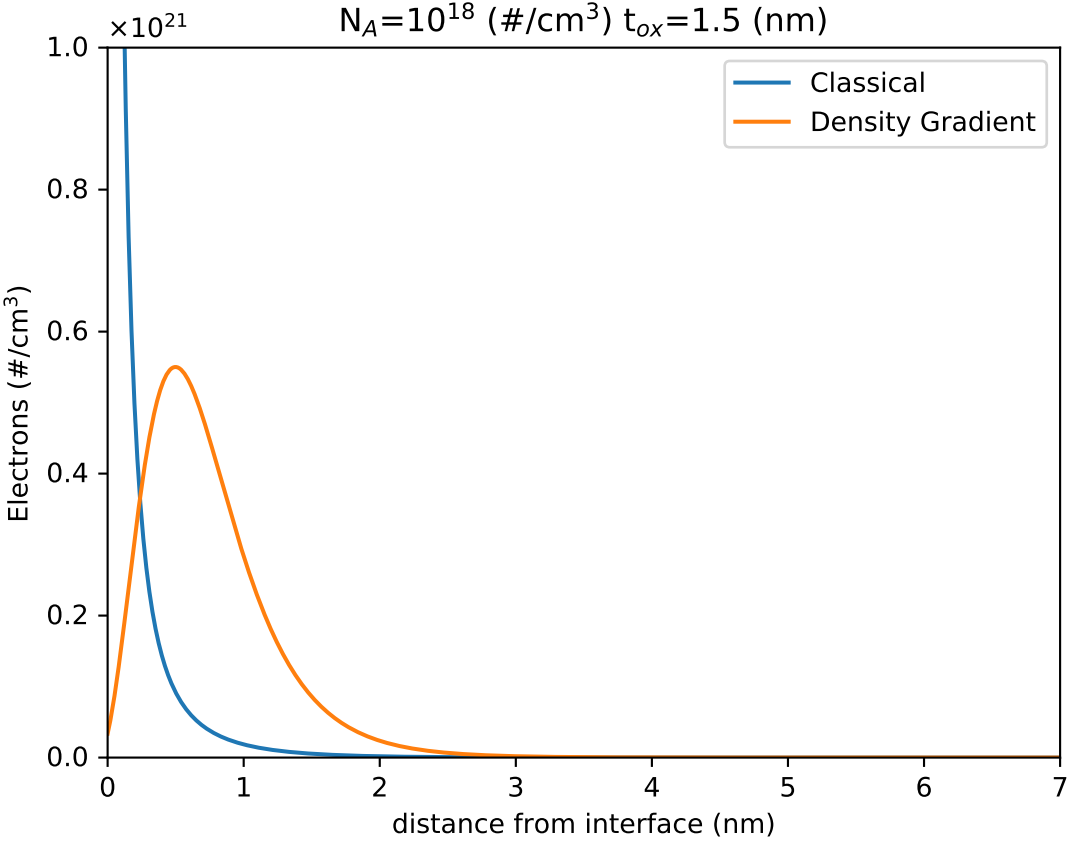
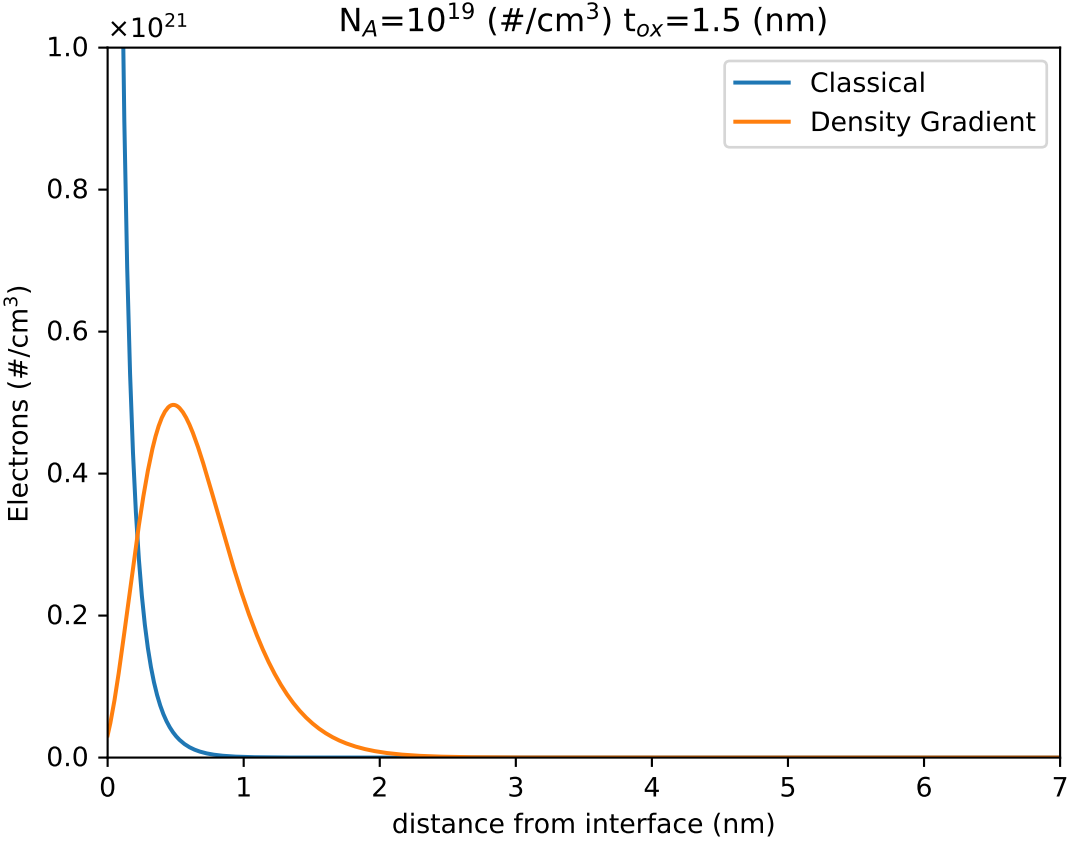
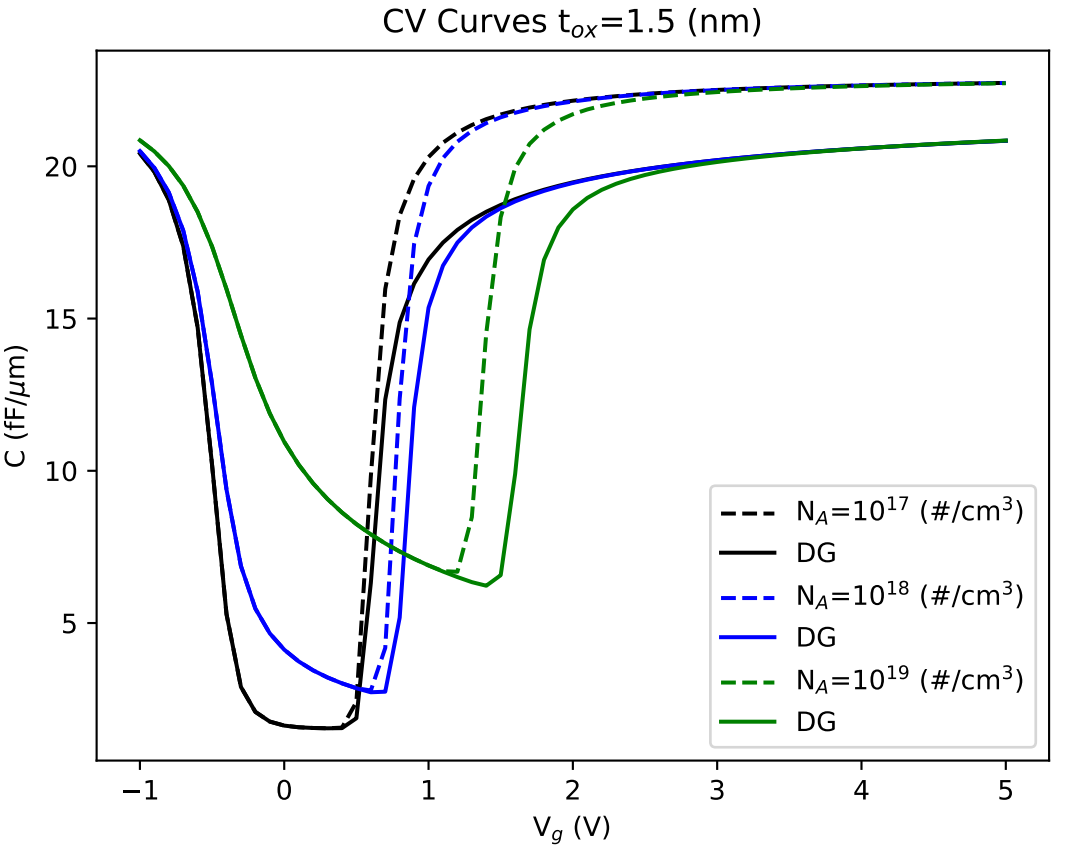

debugging plot for $N_A=10^{19}$ (#/cm^3), t_{ox}=1.5 (nm)
eq terms (eV)
distance from interface (nm)
node vol
edge vol
flux
sum
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0


$N_A=10^{17}$ (#/cm^3) t_{ox}=1.5 (nm)
×10^{21}
1.0
0.8
0.6
0.4
0.2
0.0
Electrons (#/cm^3)
0
1
2
3
4
5
6
7
distance from interface (nm)
Classical
Density Gradient


$N_A=10^{18}$ (#/cm^3) t_{ox}=1.5 (nm)
×10^{21}
1.0
0.8
0.6
0.4
0.2
0.0
Electrons (#/cm^3)
0
1
2
3
4
5
6
7
distance from interface (nm)
Classical
Density Gradient


×10^21
N_A=10^19 (#/cm^3) t_ox=1.5 (nm)
Classical
Density Gradient
Electrons (#/cm^3)
distance from interface (nm)
1.0
0.8
0.6
0.4
0.2
0.0
0
1
2
3
4
5
6
7


CV Curves t_{ox}=1.5 (nm)
C (fF/μm)
V_g (V)
20
15
10
5
−1
0
1
2
3
4
5
N_A=10^{17} (#/cm^3)
DG
N_A=10^{18} (#/cm^3)
DG
N_A=10^{19} (#/cm^3)
DG