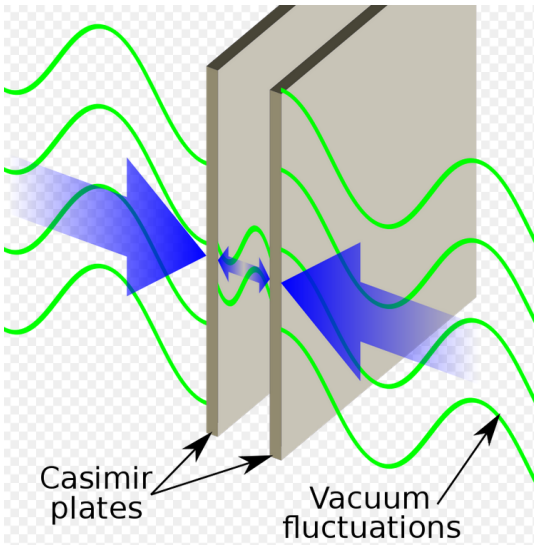


Lifshitz method:

$$U = \frac{\hbar}{8\pi^3} \int_{\mathbf{R}^+} d\xi \int_{\mathbf{R}^2} d^2k ln|G|, w = i\xi$$

$$G = E - R_1 R_2 e^{-2dK_0}$$

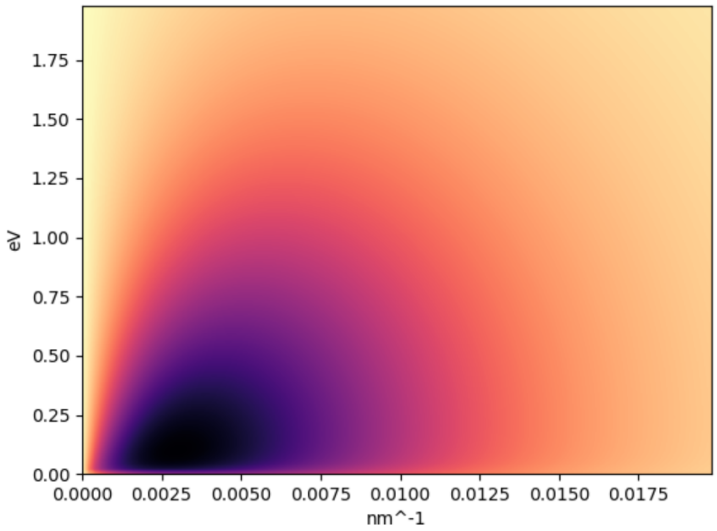
$$R_i = diag(r_i^s, r_i^p)$$

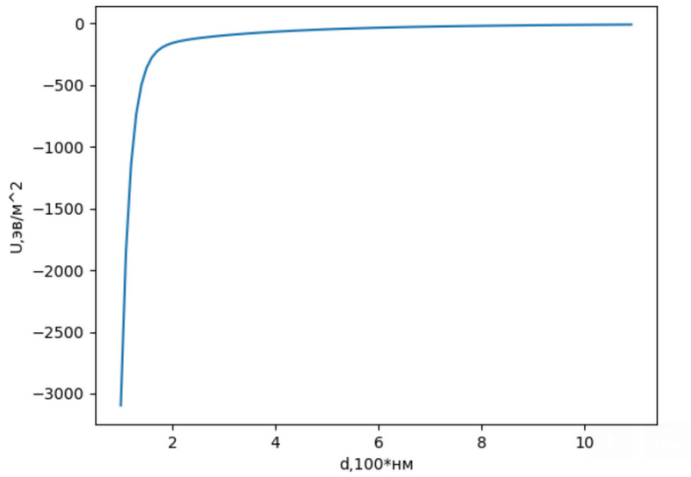
$$G(k_p) = G(-k_p)$$

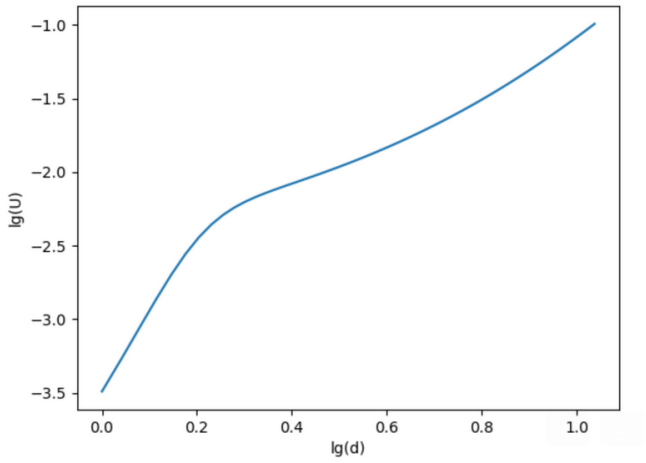
$$U = \frac{\hbar}{2\pi^3} \int_{\mathbf{R}^+} d\xi \int_{\mathbf{R}^{+2}} d^2k ln|G| = \frac{\hbar}{4\pi^2} \int_{\mathbf{R}^+} d\xi \int_{\mathbf{R}^+} dk_p ln|G|k_p$$

Two drude slabs:

$\varepsilon = 1 - \frac{10^2}{w(w+i0{,}06)}; L1, L3 = 30nm, d = 100nm$


1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
eV
0.0000
0.0025
0.0050
0.0075
0.0100
0.0125
0.0150
0.0175
nm^-1


0
−500
−1000
−1500
−2000
−2500
−3000
U,эВ/м^2
2
4
6
8
10
d,100*нм


−1.0
−1.5
−2.0
−2.5
−3.0
−3.5
lg(U)
0.0
0.2
0.4
0.6
0.8
1.0
lg(d)

$n \approx 5$