$k_F =$
$1.6 \times$
10^{10}
m^{-1}
$m =$
$9.1095 \times$
$10^{-31} kg$
9.75
eV
$e =$
$1.602 \, 10^{-34} C$
$\hbar =$
$1.0545 \times$
$10^{-34} Js^1$
$\epsilon_0 =$
$8.854 \times$
$10^{-12} Fm^{-1}$
q_{max}

$_s creen_f inal, ktorplatprevoneelektrnyinteragujceceztienenFockovue-$
$einterakciu. VezmimeFockovuself-$
$energiuzovzahueq : fock_s creen_f inal, oznameju_{self}(k())$

$_{self}(k()) =$
$-$
$\frac{e^2}{(2\pi)^2 \epsilon_0} \left(\frac{k_F^2 - k^2 + k_s^2}{4k} \ln \frac{(k_F + k)^2 + k_s^2}{(k_F - k)^2 + k_s^2} - \right.$
$k_s \left(\arctan \frac{k_F + k}{k_s} + \right.$
$\arctan \frac{k_F - k}{k_s} \right) +$
$\left. k_F \right),$
k
$k =$
$k()$
$E_{self}^{AA}()$
$q_{max} =$
∞
q_{max}
$2k_F$
$q_{max} =$
∞
$\hbar/2\tau \rightarrow$
0
$_t est.$
$_s e_t estSelf - energianormovanna_F$
$/_F$
$_F =$
9.75
eV
$q_{max} =$
∞
$q_{max} =$
$10k_F$
τ
$??$
$??$
$??$

$_m eandisnexprepisskratka7prepsanvtvarerelatvnejodchlky : \frac{\rho() - \rho_0()}{\rho_0()} =$
$-\frac{dE_{self}^{AA}()}{d} +$
$\frac{dE_{self}^{free}()}{d}, (1)$
$??$
$??$
$_t$
q_{max}
$_t au_{1c1} Panel(a) : KrivkaukzanervenoufarboujepvodnzvislosAltshulera - Aronovadanvzahomeq : erg_h ustotastavovre$
U_{co}
$_h ustotastavovrelatprvyvynech. Panel(d) ukazujecelkovzvislos\rho() -$
$\rho_0() \frac{}{\rho_0()}$
$\tau =$
$6.66 \times$
$10^{-15} \underline{s}$
$q_{max} =$
$1/l$
$??$
$\tau =$
$6.66 \times$
$10^{-15} \underline{s}$
$q_{max} =$
$1/l$
$??$
$\frac{\rho() - \rho_0()}{\rho_0()} = -\frac{e^2}{\epsilon_0 k_s^2} \frac{q_{max}}{2\pi^3 \hbar D} + \frac{e^2}{\epsilon_0 k_s^2} \frac{1}{2\pi^2 (2\hbar D)^{3/2}} \sqrt{|-_F|},$
(2)
$\frac{dE_{self}^{free}()}{d}$
$_h ustotastavovrelatpovodnyplatpre_F | U_{co}$
$U_{co} =$
$0.27 \frac{\hbar}{\tau}$
$q_{max} =$
$1/l$