

Demonstration of the Ramsauer-Townsend Effect in a Xenon Thyatron

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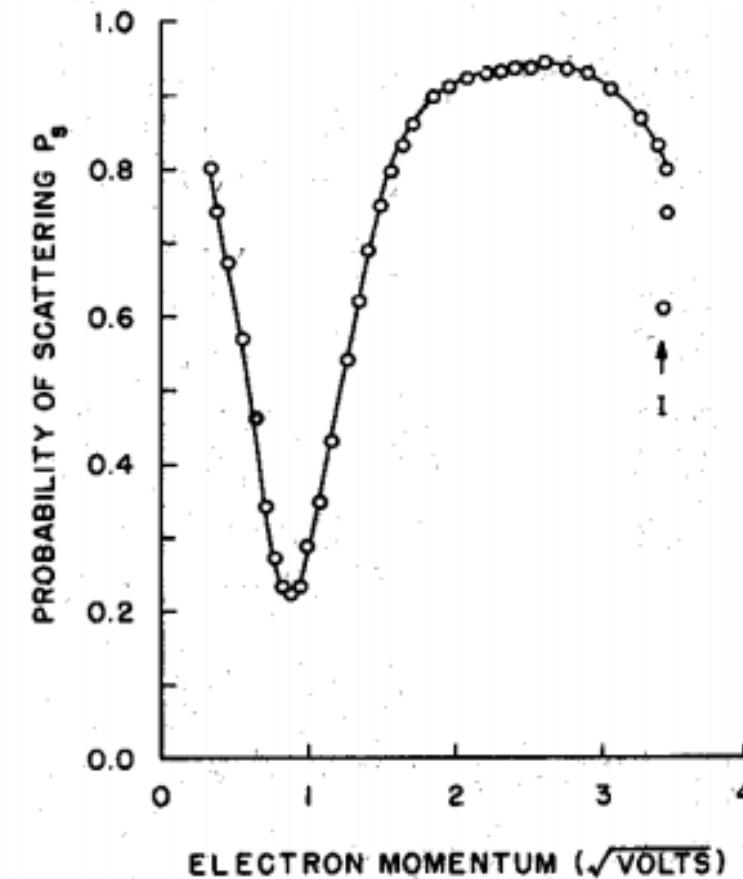
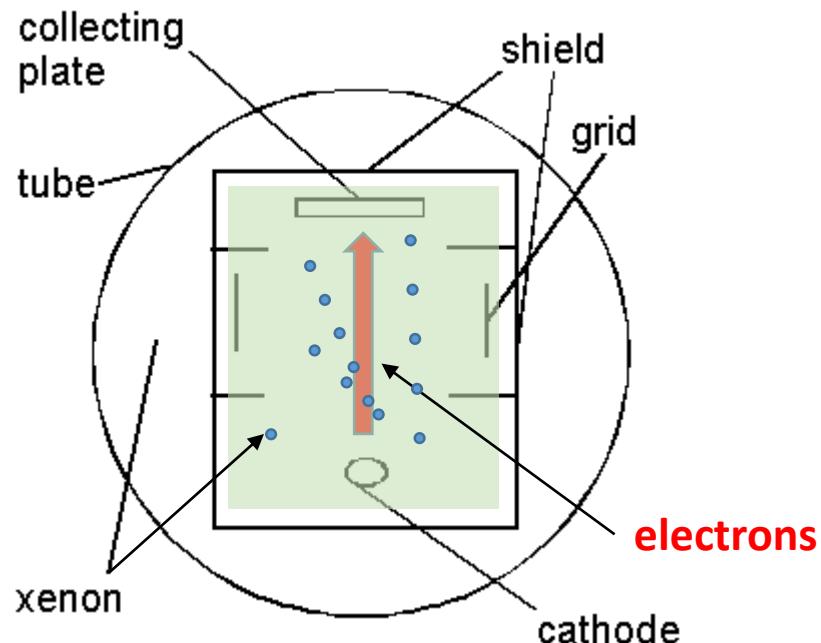


FIG. 4. The probability of scattering P_s as a function of $(V - V_s)^{1/2}$, where $V - V_s$ is the electron energy. Ionization occurs at "I".

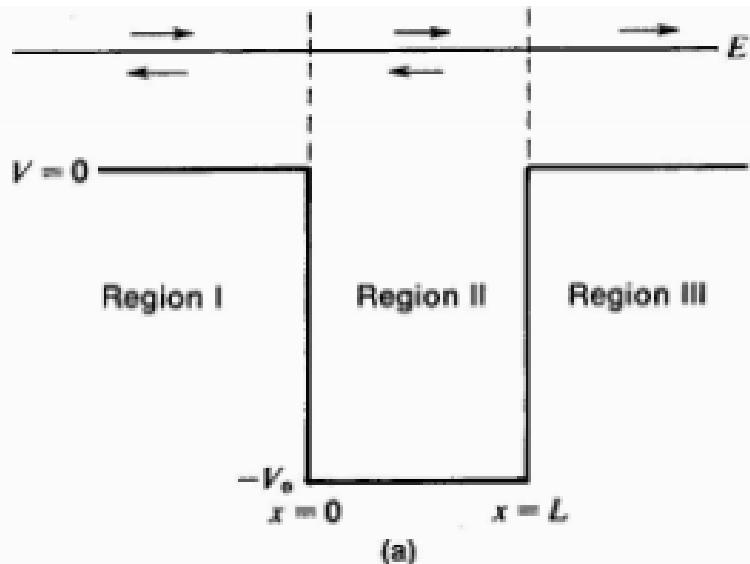
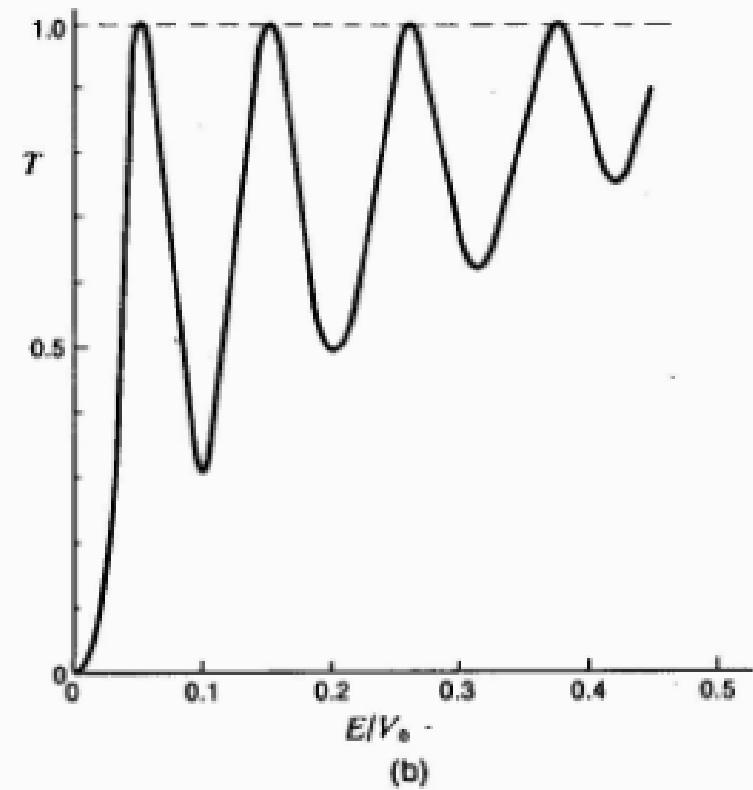


Fig. 9-5

(a) Steady-state situation for one-dimensional scattering of particles of unique energy E by a square well.

(b) Transmission coefficient T of square well as a function of incident particle energy, calculated for the dimensionless parameter

$L\sqrt{2mV_0}/\hbar$ equal to 20.5π . Note resonances giving 100 percent transmission at certain energies.



(a)

occurs at "I".
maximum value of V_0 is the ejection energy $E = V_0$, where $V_0 = \hbar^2/(2m)$.
to solution of eq. 9-12 is due to reflection and transmission at $E = V_0$.

EJECTION AND TRANSMISSION (STOKE'S)

