was mit den oben angeführten Daten ergibt ($\mu_h = 10^3 \text{ cm}^2/\text{V s})$

$$R_{\omega = 0} \sim 4 \cdot 10^8,$$

also sehr grosse Werte.

Selbstverständlich kann eine Ladungsneutralisierung auch durch ein in der Nähe des Elektrons ebenfalls festesitzendes Loch erfolgen, so dass dieser Wert nur als obere Schranke zu lesen ist.

Auf die einleuchtenden Beziehungen mit Anfangs- und Abklingzeiten des Photostromes in Photohalbleitern und der Phosphoreszenz von Luminophoren sei hingewiesen. So besteht die Möglichkeit, durch Annahme einer kontinuierlichen Haftstellenverteilung, wie sie Garlick zur Deutung des Abklingens von ZnS-Cu-Phosphoren verwendet, eine Frequenzabhängigkeit proportional $f^{-k} (1 \leq k \leq 2)$ zu erklären.

**Summary**

The wellknown trapping of electrons and holes seems to give an explanation of the current noise in semiconductors. It is pointed out how especially the magnitude and low frequency dependence of the noise power can be understood; the possibility of a strong correlation between low frequency noise and photo-conductive properties of semiconductors is emphasized.

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**Vibration of Isosceles Triangular Plates**

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1. **Introduction**

Frequently in the analysis of structures it is necessary to determine the lowest natural frequency of flexural vibration of a triangular plate. The approximate solution presented in this paper is based essentially upon the method of collocation, i.e. for an assumed deflection function, which satisfies the boundary conditions, the governing differential equation for the plate is satisfied at a finite number of points. Comparisons are made for certain cases with other known solutions, and the agreement appears to be satisfactory.

2. **Simply Supported Plates**

Let $x$ and $y$ be coordinates in the middle surface of the plate as shown in the lower part of Figure 1. The static differential equation for a uniform plate subjected to a uniformly distributed lateral load is

$$DV^2 V^2 w = q,$$
where
\[ D = \text{plate stiffness}; \]
\[ w = \text{deflection of plate, positive downward}; \]
\[ q = \text{lateral load per unit length squared}. \]

If the term \( q \) in the above equation is replaced by an equivalent inertia load when the plate is vibrating, there results
\[ D \nu^2 \nu^2 w = \frac{q \omega^2}{g} w, \quad (1) \]

where
\[ \omega = \text{natural frequency}; \]
\[ g = \text{gravitational acceleration}. \]

The boundary conditions are
\[ (w)_{y=h} = (w)_{y=-(a/k)} = 0, \quad (2) \]
\[ \left( \frac{\partial^2 w}{\partial y^2} + \nu \frac{\partial^2 w}{\partial t^2} \right)_{y=h} = \left( \frac{\partial^2 w}{\partial y^2} + \nu \frac{\partial^2 w}{\partial t^2} \right)_{x=\pm(a/k)} = 0, \quad (3) \]