Proceedings of the Iowa Academy of Science

Volume 36 | Annual Issue Article 97

1929

Intensity of Mercury Lines Excited by Positive Ions

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(3) With increase in temperature a decrease in intensity (about 20%) of the peak denoting molecular widths was observed. This is probably due to two causes: (a) expansion of the liquid, (b) disarrangement of the scattering centers, thus diminishing the effective scattering interference.

These results and conclusions are found to be in harmony with the theory of the cybotactic condition.

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A MOLECULAR VELOCITY FILTER

JOHN A. ELDRIDGE

A method has previously been described by which the velocity of molecules could be measured. A qualitative combination of Maxwell's distribution law was obtained. A filter is being constructed which will have much greater resolving power and also greater sensitivity.

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AN INVESTIGATION OF THE CRITICAL POTENTIALS OF THE SPARK SPECTRUM OF CADMIUM

DEVER COLSON

The direct spectroscopic method was used in which the spectrum was excited by electron impact. The accelerating voltage on the electrons was varied 8.8 (ionization potential of Cd) up to 200 volts. Measurements on the films were made with a microphotometer. The effects of change of plate current and vapor pressure were investigated.

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INTENSITY OF MERCURY LINES EXCITED BY POSITIVE IONS

C. FRISCHE

Observations were made concerning the intensity of lines of the

mercury spectrum as excited by positive ions. The results were compared with corresponding data on the electron spectrum given by previous observers. Intensity measurements were made with a microphotometer.

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