

1941

## The Evaporation of Metals from Hot Filaments (Abstract)

Wallace C. Caldwell  
*Iowa State College*

Copyright ©1941 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

---

### Recommended Citation

Caldwell, Wallace C. (1941) "The Evaporation of Metals from Hot Filaments (Abstract)," *Proceedings of the Iowa Academy of Science*, 48(1), 306-306.

Available at: <https://scholarworks.uni.edu/pias/vol48/iss1/78>

This Research is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).

Flash characteristics are estimated and performance criteria are proposed.

Comparative experimental results are given and improvements in design are discussed.

DEPARTMENT OF PHYSICS,  
IOWA STATE COLLEGE,  
AMES, IOWA.

---

THE EVAPORATION OF METALS FROM HOT  
FILAMENTS

(ABSTRACT)

WALLACE C. CALDWELL

Several investigators have used the evaporation technique for making surface mirrors, thermocouples, high resistances, and other devices. The method usually used involves attaching the metal to be evaporated to a refractory filament that is heated electrically. In this work the results of visual observations of wetting of the filament by the molten metal, of evaporation, and of any obvious alloying of the molten metal with the filament material enables the determination of the best filament to be used with each metal.

DEPARTMENT OF PHYSICS,  
IOWA STATE COLLEGE,  
AMES, IOWA.

---

SCATTERING OF POTASSIUM IONS IN VARIOUS GASES

(ABSTRACT)

JOHN A. ELDRIDGE

Development of method for measurement of the scattering of ions projected as a beam with energies 50-400 e-volts. Results are given for scattering at different angles.

STATE UNIVERSITY OF IOWA,  
IOWA CITY, IOWA.