

1938

Elasticity of Lead Crystals

Andrew F. Deming
State University of Iowa

Let us know how access to this document benefits you

Copyright ©1938 Iowa Academy of Science, Inc.

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

Recommended Citation

Deming, Andrew F. (1938) "Elasticity of Lead Crystals," *Proceedings of the Iowa Academy of Science*, 45(1), 207-207.

Available at: <https://scholarworks.uni.edu/pias/vol45/iss1/49>

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.

The survey was made with 185 students in 1936 and 140 students in 1938. The results for these two groups was almost identical.

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

SEVERAL SIMPLE LECTURE EXPERIMENTS

JOHN A. ELDRIDGE

A number of simple lecture experiments were demonstrated. These dealt mainly with inexpensive apparatus and had to do in the main with transformer circuits when the secondary was first open and then closed.

PHYSICS DEPARTMENT,
STATE UNIVERSITY OF IOWA,
IOWA CITY, IOWA.

ELASTICITY OF LEAD CRYSTALS

ANDREW F. DEMING

Baker (University of Illinois) has found that for "resolved shear stress" above 100 lb./sq. in. lead crystals exhibit "creep" and are inelastic. By using the bending beam method it is possible to test for elasticity below Baker's limit. It is then found that lead single crystals, specimens containing several large crystals and even multi-crystal specimens have a definite Hooke's Law region of elastic behavior with no creep.

PHYSICS DEPARTMENT,
STATE UNIVERSITY OF IOWA,
IOWA CITY, IOWA.

SOME PROPERTIES OF SINGLE CRYSTALS OF BETA BRASS

WAYNE WEBB

A set of twenty beta brass single crystals has been grown and an optical method devised for determining the orientation of the