# Article information:

Sci-Hub | Amorphous versus Crystalline GeTe Films. III. Electrical Properties and Band Structure. Journal of Applied Physics, 41(5), 2196–2212 | 10.1063/1.1659189
<https://sci-hub.st/10.1063/1.1659189>

# Article summary:

1. This article examines the electrical properties and band structure of amorphous and crystalline GeTe films.

2. The authors found that the electrical properties of amorphous GeTe films are significantly different from those of crystalline films, with higher resistivity and lower mobility.

3. The authors also studied the band structure of both types of films, finding that the band gap in amorphous GeTe is much larger than in crystalline GeTe.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

This article is a reliable source of information as it was published in a reputable journal (Journal of Applied Physics) and has been peer-reviewed by experts in the field. The authors have provided evidence to support their claims, such as data from experiments conducted on both amorphous and crystalline GeTe films. Furthermore, they have discussed potential limitations to their findings, such as the fact that their results may not be applicable to other materials or conditions. However, there is some potential for bias in this article due to its focus on only two types of materials (amorphous and crystalline GeTe). Additionally, there is no discussion of any possible risks associated with using these materials or any counterarguments to the authors' conclusions. Finally, while the authors have presented both sides equally in terms of discussing their findings, they do not provide an equal amount of detail for each side; for example, they provide more detail about the electrical properties than about the band structure.

# Topics for further research:

* Risks associated with GeTe materials
* Counterarguments to GeTe electrical properties
* Band structure of amorphous materials
* Experimental methods for studying GeTe films
* Comparison of amorphous and crystalline GeTe
* Applications of GeTe materials in electronics

# Report location:

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