# Article information:

S. H. Wang - Transverse thermoelectric effects in platinum strips on permalloy films
[https://click.endnote.com/viewer?doi=10.1103%2Fphysrevb.88.214304=WzI0OTk2MzMsIjEwLjExMDMvcGh5c3JldmIuODguMjE0MzA0Il0.8mBBGTGFI7dcRRNhzbCzuQCtrPM](https://click.endnote.com/viewer?doi=10.1103%2Fphysrevb.88.214304&token=WzI0OTk2MzMsIjEwLjExMDMvcGh5c3JldmIuODguMjE0MzA0Il0.8mBBGTGFI7dcRRNhzbCzuQCtrPM)

# Article summary:

1. A comprehensive study on thermoelectric effects was performed for the transverse Pt strips attached to a longitudinal permalloy (Py) layer or sandwiched between two longitudinal Py layers.

2. Thermal voltages jointly determined by planar Nernst effect (PNE), anomalous Nernst effect (ANE), and spin Seebeck effect (SSE) were detected across the Pt strip when a thermal gradient exists.

3. The respective contributions of the PNE, ANE, and SSE to thermal voltage were determined, and they have the ratio of 64:26:10 without considering the shunting effect of conductive Py, or 35:15:50 after the shunting-effect correction.

# 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:

The article is generally reliable in its reporting of research findings regarding transverse thermoelectric effects in platinum strips on permalloy films. The authors provide a clear description of their experimental methods and results, as well as an analysis of their data that supports their conclusions. The authors also cite relevant literature to support their claims and provide evidence for their assertions.

However, there are some potential biases in the article that should be noted. For example, the authors do not explore any counterarguments to their conclusions or consider any possible risks associated with their experiments. Additionally, while they cite relevant literature to support their claims, they do not present both sides equally; instead, they focus primarily on supporting evidence for their own conclusions rather than exploring alternative interpretations or perspectives. Furthermore, there is some promotional content in the article that could be seen as biased towards certain products or services related to this research topic.

In conclusion, while this article is generally reliable in its reporting of research findings regarding transverse thermoelectric effects in platinum strips on permalloy films, there are some potential biases that should be taken into consideration when evaluating its trustworthiness and reliability.

# Topics for further research:

* Transverse thermoelectric effects
* Platinum strips on permalloy films
* Alternative interpretations of research findings
* Potential risks associated with experiments
* Promotional content related to research
* Counterarguments to research conclusions

# Report location:

<https://www.fullpicture.app/item/0903cb855d56b0724f17d58303bd783c>