# Article information:

Sci-Hub | A monolayer MoS2 p-n homogenous photodiode with enhanced photoresponse by piezo-phototronic effect. 2D Materials, 5(3), 035038 | 10.1088/2053-1583/aac96b
<https://sci-hub.ru/10.1088/2053-1583/aac96b>

# Article summary:

1. This article discusses the development of a monolayer MoS2 p-n homogenous photodiode with enhanced photoresponse by piezo-phototronic effect.

2. The device was fabricated using a two-step process, which included the deposition of MoS2 on a SiO2/Si substrate and the formation of an n-type contact layer.

3. The results showed that the device had an improved photoresponse compared to conventional devices due to its piezo-phototronic effect.

# 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 and trustworthy, as it provides detailed information about the fabrication process and results of the device developed. The authors have also provided evidence for their claims in terms of experimental data and simulations, which adds to its credibility. Furthermore, there is no promotional content or partiality in the article, as it presents both sides equally and does not make any unsupported claims or missing points of consideration.

However, there are some potential biases in the article that should be noted. For example, the authors do not explore any counterarguments or possible risks associated with their device, which could lead to an incomplete understanding of its implications. Additionally, some evidence for their claims is missing, such as further experiments or simulations that could provide more insight into how their device works and how it can be improved upon in future research.

# Topics for further research:

* Fabrication process risks
* Simulation results comparison
* Counterarguments for device development
* Implications of device fabrication
* Future research on device fabrication
* Experimental data for device fabrication

# Report location:

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