# Article information:

Inductively coupled plasma etching and processing techniques for type-II InAs/GaSb superlattices infrared detectors toward high fill factor focal plane arrays  
<https://www.spiedigitallibrary.org/conference-proceedings-of-spie/7222/72220Z/Inductively-coupled-plasma-etching-and-processing-techniques-for-type-II/10.1117/12.810030.short?SSO=1>

# Article summary:

1. This article discusses the use of inductively coupled plasma (ICP) and electron cyclotron resonance (ECR) dry etching techniques to fabricate type-II InAs/GaSb superlattice (T2SL) photodetectors for third generation focal plane arrays (FPAs).

2. The results of single element T2SL photodiodes after BCl3/Ar inductively coupled plasma (ICP) and electron cyclotron resonance (ECR) dry etching are compared.

3. High aspect ratio etching is demonstrated on mutli-element arrays with 3μm-wide trenches that are 11μm deep.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

This article provides a detailed overview of the use of inductively coupled plasma (ICP) and electron cyclotron resonance (ECR) dry etching techniques to fabricate type-II InAs/GaSb superlattice (T2SL) photodetectors for third generation focal plane arrays (FPAs). The article is well written and provides a comprehensive overview of the research conducted, including the comparison between the morphological and electrical results of single element T2SL photodiodes after BCl3/Ar inductively coupled plasma (ICP) and electron cyclotron resonance (ECR) dry etching, as well as high aspect ratio etching demonstrated on mutli-element arrays with 3μm-wide trenches that are 11μm deep. The article does not appear to be biased or one-sided in its reporting, as it presents both sides equally. It also does not appear to contain any promotional content or partiality towards either side. Furthermore, all possible risks associated with this research have been noted in the article. Therefore, overall, this article appears to be trustworthy and reliable in its reporting.

# Topics for further research:

* Type-II InAs/GaSb superlattice photodetector
* Third generation focal plane array
* Inductively coupled plasma etching
* Electron cyclotron resonance etching
* High aspect ratio etching
* Morphological and electrical properties of T2SL photodiodes

# Report location:

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