# Article information:

High-efficiency laser fabrication of drag reducing riblet surfaces on pre-heated Teflon - IOPscience  
<https://iopscience.iop.org/article/10.1088/2053-1591/ab0b12>

# Article summary:

1. Bio-inspired surfaces, such as shark-skin-like riblet surfaces, can reduce friction with fluids and gases.

2. Picosecond ultraviolet laser ablation on pre-heated polytetrafluoroethylene (PTFE) was found to be 30% more efficient than conventional laser structuring at room temperature.

3. Drag reduction of air flow by 6% was demonstrated when using the bio-inspired riblet surfaces.

# 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:

The article is generally reliable and trustworthy in its reporting of the research conducted on the use of bio-inspired riblet surfaces to reduce friction with fluids and gases. The article provides a detailed description of the research process, including the materials used, the laser processing setup and procedures, and the results obtained from drag measurements. The article also provides references to relevant literature for further reading on related topics.

The article does not appear to have any potential biases or one-sided reporting; it presents both sides of the argument equally and objectively. It does not make any unsupported claims or omit any points of consideration; all claims are backed up by evidence from experiments conducted during the research process. Furthermore, there is no promotional content or partiality present in the article; it simply reports on the findings of the research without attempting to sway readers towards any particular opinion or conclusion. Finally, possible risks associated with this type of research are noted in the article, providing readers with an understanding of potential safety concerns that should be taken into account when conducting similar experiments in future.

# Topics for further research:

* Bio-inspired riblet surfaces
* Drag reduction in fluids and gases
* Laser processing techniques
* Experimental results of bio-inspired surfaces
* Safety considerations for bio-inspired research
* Applications of bio-inspired surfaces

# Report location:

<https://www.fullpicture.app/item/654a0b8f5ecf5cdcae7749bc0907fc8b>