# Article information:

Surface Monocrystallization of Copper Foil for Fast Growth of Large Single-Crystal Graphene under Free Molecular Flow - PubMed  
<https://pubmed.ncbi.nlm.nih.gov/27562642/>

# Article summary:

1. A new method of surface monocrystallization of copper foil has been developed, which enables fast growth of large single-crystal graphene arrays under molecular flow.

2. The maximum growth rate can reach 300 μm min-1, several orders of magnitude higher than previously reported values for millimeter-sized single-crystalline graphene growth on Cu foils.

3. This method is achieved via simple oxygen chemisorption-induced reconstruction, enabling wafer-sized single-crystalline Cu (100) surfaces to be readily achieved on stacked polycrystalline Cu foils.

# 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 in its reporting and presentation of the research findings. The authors provide a detailed description of their methodology and results, as well as a thorough discussion of the implications and potential applications of their work. The article also includes references to other relevant studies in the field, providing further evidence for the claims made by the authors.

However, there are some potential biases that should be noted. For example, the authors do not discuss any possible risks associated with this method or any potential drawbacks that could arise from its implementation. Additionally, they do not explore any counterarguments or alternative approaches to achieving similar results. Furthermore, while the authors provide references to other relevant studies in the field, they do not present both sides equally; instead focusing primarily on their own research findings and conclusions without providing an equal amount of attention to opposing views or alternative approaches.

# Topics for further research:

* Risk assessment of artificial intelligence
* Potential drawbacks of artificial intelligence
* Counterarguments to artificial intelligence
* Alternative approaches to artificial intelligence
* Ethical implications of artificial intelligence
* Social implications of artificial intelligence

# Report location:

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