# Article information:

3D printing of PLA/n-HA composite scaffolds with customized mechanical properties and biological functions for bone tissue engineering - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S1359836821005709?via%3Dihub=>

# Article summary:

1. Bone defects require suitable bone substitutes with good mechanical strength and bioactivity.

2. 3D printing technology allows for the fabrication of customized scaffolds with controlled porosity and interconnected structure.

3. PLA/n-HA composite scaffolds show potential as a bone tissue scaffold due to their combination of mechanical strength and biological activity, as well as the ability to neutralize acidic degradation products.

# Article rating:

Appears strongly imbalanced: The article is written in a biased or one-sided way, and the information it provides is not trustworthy enough to be considered a reliable source. You should consult other sources to find reliable information on the presented issues.

# Article analysis:

该文章主要介绍了3D打印PLA/n-HA复合支架在骨组织工程中的应用。然而，该文章存在以下问题：

1. 偏见来源：该文章没有提及其他可行的骨替代品，只是简单地介绍了自体骨移植和异体骨移植的缺点。这可能会导致读者对其他选择的忽视。

2. 片面报道：该文章只强调了PLA/n-HA复合支架的优点，但没有提到其缺点。例如，n-HA可能会引起免疫反应，并且PLA降解产物可能会影响缺陷区域的酸碱平衡。

3. 无根据的主张：该文章声称PLA具有类似于天然骨的压缩强度，但未提供任何证据来支持这一主张。

4. 缺失考虑点：该文章没有考虑到复合支架在实际使用中可能遇到的问题，如生物相容性、机械稳定性和长期耐久性等方面。

5. 主张缺失证据：该文章声称通过调整不同材料比例参数可以开发特定的3D打印生物墨水，但未提供任何实验证据来支持这一主张。

6. 未探索的反驳：该文章没有探讨其他学者对PLA/n-HA复合支架在骨组织工程中的应用的不同看法和反驳。

7. 宣传内容：该文章似乎更像是一篇宣传3D打印技术和PLA/n-HA复合支架的文章，而不是一篇客观评价其优缺点的科学论文。

综上所述，该文章存在偏见、片面报道、无根据的主张、缺失考虑点、主张缺失证据、未探索反驳和宣传内容等问题。因此，读者需要谨慎对待其中提出的观点，并寻找其他来源来获取全面和客观的信息。

# Topics for further research:

* Other bone substitute options
* Limitations and drawbacks of PLA/n-HA composite scaffolds
* Evidence supporting PLA's compression strength similarity to natural bone
* Practical considerations for composite scaffold use in bone tissue engineering
* Evidence for developing specific 3D printing bioinks through adjusting material ratios
* Alternative perspectives and criticisms of PLA/n-HA composite scaffold use in bone tissue engineering

# Report location:

<https://www.fullpicture.app/item/eaa2ab80c1010f5aa864def8f1598008>