# Article information:

Apatite-inducing ability of titanium oxide layer on titanium surface: The effect of surface energy | Journal of Materials Research | Cambridge Core  
<https://www.cambridge.org/core/journals/journal-of-materials-research/article/apatiteinducing-ability-of-titanium-oxide-layer-on-titanium-surface-the-effect-of-surface-energy/7B100931A3DD3A93BBEC5952E646DDA7>

# Article summary:

1. The formation of a bonelike apatite layer between the implant and bone is essential for osseointegration of cementless Ti implants.

2. Titanium oxide on a Ti implant surface plays a critical role in the deposition of the apatite layer.

3. Various surface modification techniques have been used to create titanium oxide layers with different morphologies and structures, and their in vitro bioactivities have been extensively evaluated.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

由于本文只提供了文章的引言部分，无法对其进行全面的批判性分析。但是，从引言中可以看出，文章主要探讨钛表面氧化层对骨化合物沉积的影响。然而，文章可能存在偏见和片面报道的问题，因为它只关注了钛表面氧化层的形态和结构对骨化合物沉积的影响，并没有考虑其他因素（如生物活性、机械强度等）对骨化合物沉积的影响。此外，文章也没有提供足够的证据来支持其所提出的主张。因此，在阅读该文章时需要保持批判性思维，并注意到可能存在的偏见和不足之处。

# Topics for further research:

* Other factors affecting bone deposition on titanium surfaces
* Biological activity of titanium surfaces
* Mechanical strength of titanium surfaces
* Evidence supporting the claims in the article
* Potential biases in the article
* Critical analysis of the article's conclusions

# Report location:

<https://www.fullpicture.app/item/85c727b0ab067815e32b54346d1c1c77>