

## Match Overview

- | Rank | Match Type | Words    | Source  | Similarity |
|------|------------|----------|---|------------|
| 1    | Crossref   | 29 words | Stranak, V.. "Deposition of thin titanium-copper films with an... microbial effect by advanced magnetron sputtering methods",   | 1%         |
| 2    | Crossref   | 21 words | Hoene, Andreas, Cornelia Prinz, Uwe Walschus, Silke Lucke, Maciej Patrzyk, Lutz Wilhelm, Hans-Georg Neumann, and Mic            | <1%        |
| 3    | Crossref   | 9 words  | LÄythen, Frank, Claudia Bergemann, Ulrike Bulnheim, Cornelia Prinz, Hans Georg Neumann, Andreas Podbielski, Rain...             | <1%        |
| 4    | Crossref   | 9 words  | Finke, B.. "The effect of positively charged plasma polymer... ation on initial osteoblastic focal adhesion on titanium surface | <1%        |
| 5    | Crossref   | 9 words  | Matschegewski, C.. "Cell architecture@?cell function deper... encies on titanium arrays with regular geometry", Biomaterial     | <1%        |

Name of Journal: *World Journal of Transplantation*

Manuscript NO: 31626

Manuscript Type: Original Article

### Basic Study

Copper as an alternative antimicrobial coating for implants - an *in vitro* study

Claudia Bergemann, Sarah Zaatreh, Katharina Wegner, Kathleen Arndt, Andreas Podbielski, Rainer Bader, Cornelia Prinz, Ulrich Lembke, J Barbara Nebe

### Abstract

**Aim:** Osteoconductive and antimicrobial properties of a titanium-copper-nitride film and an additional BONIT® coating on titanium substrates was investigated.

**Methods:** For micro-structuring, the surface of titanium test samples was modified by titanium plasma spray (TPS). On the TPS-coated samples, the titanium-copper-nitride (TiCuN) layer was deposited by physical vapor deposition. The BONIT®

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## Google 学术 : Copper as an alternative antimicrobial coating for implants - an in vitro study

Antibacterial coatings on titanium implants - Zhao - 被引用次数 : 406

... co-sputtered silver-containing hydroxyapatite coating - Chen - 被引用次数 : 407

... dioxide (TiO<sub>2</sub>) coating for metallic implants: in vitro ... - Haenle - 被引用次数 : 44

## Alternative Antimicrobial Approach: Nano-Antimicrobial Materials

<https://www.hindawi.com/journals/ecam/2015/246012/> - 翻译此页

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## The Future of Biologic Coatings for Orthopaedic Implants - NCBI - NIH

[https://www.ncbi.nlm.nih.gov/NCBI/Literature/PubMed Central \(PMC\)](https://www.ncbi.nlm.nih.gov/NCBI/Literature/PubMedCentral(PMC)) - 翻译此页

作者 : SB Goodman - 2013 - 被引用次数 : 241 - 相关文章

2013年2月4日 - Keywords: implant coatings, orthopaedics, osseointegration, .... As an alternative of using proteins or peptides, DNA molecules have also been .... In vitro and in vivo studies have been carried out to determine the .... Other less commonly investigated inorganic antimicrobial agents such as copper, fluorine, ...

## Frontiers | Copper an alternative antimicrobial coating

[www.frontiersin.org/10.3389/conf.FBIOE.2016.01.../event\\_abstract](http://www.frontiersin.org/10.3389/conf.FBIOE.2016.01.../event_abstract) - 翻译此页

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Summary: Implant surface coatings with an antimicrobial activity can ... [1] Ince, A et al Gentamicin



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## Frontiers | Copper an alternative antimicrobial coating

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Summary: Implant surface coatings with an antimicrobial activity can ... [1] Ince, A et al Gentamicin negatively influenced osteogenic function in vitro

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作者: SB Goodman - 2013 - 被引用次数: 241 - 相关文章

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## Antibacterial coating of implants in orthopaedics and trauma: a ... - NCBI

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2015年10月1日 - Antibacterial coating of implants in orthopaedics and trauma: a ... In the last decade, several studies have investigated the ability of implant surface .... Antibacterial surface technologies can employ metals (silver, zinc, copper, etc.) ... in preventing infection compared with standard HA coatings in vivo, but ...