

Effect of the surface structure of titanium implants on the response to the bone tissue

S. K. Lazarouk ¹,

O. V. Kupreeva ²,

O. N. Dudichc (Foreign) ³,

V. L. Krasilnikova (Foreign) ⁴,

S. I. Bahayeu (Foreign) ⁵

2017

1, 2 Belarusian State University of Informatics and Radioelectronics, P. Browka 6, 220013 Minsk, Belarus

3, 4, 5 Foreign

Keywords: Titanium plates, nanostructured titania surface, regeneration process.

Abstract: The growth of bone tissue on titanium plates and mounting screws during surgical treatment of rabbit bones was studied. The growth of bone tissue was more intensive on the developed nanostructured titania surface in comparison with the planar titania surface. The methods of electrochemical treatment of a titanium surface in order to control the regeneration process of the bone tissue on the titanium constructions were proposed.

Published in:

Proceedings of International Conference “Nanomeeting – 2017” in “Physics, Chemistry and Application of Nanostructures”, ed. by V. E.

Borisenko, S. V. Gaponenko, V. S. Gurin, C. H. Kam, p. 433-436. –
https://doi.org/10.1142/9789813224537_0101.

Read More:

http://www.worldscientific.com/doi/abs/10.1142/9789813224537_0101.