

## 2008 — NAKANO Takayoshi

### Scientific Papers/Commentary Articles

1. T. Nakano, W. Fujitani, T. Ishimoto and Y. Umakoshi, Adaptation of BAp crystal orientation to stress distribution in rat mandible during bone growth, *Journal of Physics; conference series*, 165, 012584, 2009
2. T. Ishimoto, T. Nakano, Y. Umakoshi and Y. Tabata, Changes in bone microstructure and toughness during healing process of long bone, *Journal of Physics; conference series*, 165, 012085, 2009
3. S. Miyabe, T. Ishimoto and T. Nakano, Preferential orientation of biological apatite in normal and osteoporotic human vertebral trabeculae, *Journal of Physics; conference series*, 165, 012087, 2009
4. S.-H. Lee, K. Hagihara, M.-H. Oh and T. Nakano, Single-crystal growth and plastic deformation behaviour of a Ti-15Mo-5Zr-3Al alloy for biomedical application, *Journal of Physics; conference series*, 165, 012086, 2009
5. Y. Noyama, N. Nagayama, K. Kuramoto and T. Nakano, The optimal design of implant for improving bone quality in the implant surroundings based on stress analysis, *Journal of Physics; conference series*, 165, 012088, 2009
6. T. Nagase, K. Kinoshita, T. Nakano and Y. Umakoshi, Fabrication of Ti-Zr Binary Metallic Wire by Arc-Melt Type Melt-Extraction Method, *Materials Transactions*, 50 [4], 872-878, 2009
7. Y. Suzawa, T. Funaki, J. Watanabe, S. Iwai, Y. Yura, T. Nakano, Y. Umakoshi and M. Akashi, Regenerative behavior of biomineral / agarose composite gels as bone grafting materials in rat cranial defects, *Journal of Biomedical Materials Research; PartA*, 93A Issue 3 [6], 965-975, 2009
8. A. Sugino, C. Ohtsuki, K. Tsuru, S. Hayakawa, T. Nakano, Y. Okazaki and A. Osaka, Effect of spatial design and thermal oxidation on apatite formation on Ti-15Zr-4Ta-4Nb alloy, *Acta Biomaterialia*, 5, 298-304, 2009
9. K. Alvarez, S.-K. Hyun, T. Nakano, Y. Umakoshi and H. Nakajima, In vivo osteocompatibility of lotus-type porous nickel-free stainless steel in rats, *Materials Science and Engineering C*, 29, 1182-1190, 2008
10. M. Tane, S. Akita, T. Nakano, K. Hagihara, Y. Umakoshi, M. Niinomi and H. Nakajima, Peculiar elastic behavior of Ti-Nb-Ta-Zr single crystals, *Acta Materialia*, 56, 2856-2863, 2008
11. S. Hata, T. Nakano, N. Kuwano, M. Itakura, S. Matsumura and Y. Umakoshi, Microscopic properties of long-period ordering in Al-rich TiAl alloys, *Metallurgical and Materials Transaction A*, 39, 1610-1617, 2008

12. K. Sasaki, T. Nakano, J.D. Ferrara, J.-W. Lee and T. Sasaki, New technique for evaluation of preferential alignment of biological apatite (BAP) crystallites in bone using transmission X-ray diffractometry, *Materials Transactions*, 49, 2129-2135, 2008

#### **International Conference Proceedings**

1. K. Sasaki, T. Sasaki, T. Nakano, Y. Umakoshi and J.D. Ferrara, The evaluation of preferential alignment of biological apatite (BAP) crystallites in bone using transmission X-ray diffraction method, *Advance in X-ray Analysis*, 51, 155-161, 2008
2. T. Nakano, T. Tachibana, K. Hagihara, Y. Umakoshi, T. Ide, M. Tane and H. Nakajima, Fabrication and plastic deformation behavior of lamellar Ti-rich TiAl crystals with lotus-type aligned pores, *Proceedings of MetFoam 2007*, 213-216, 2008