

Journal of Biomaterials and Nanobiotechnology

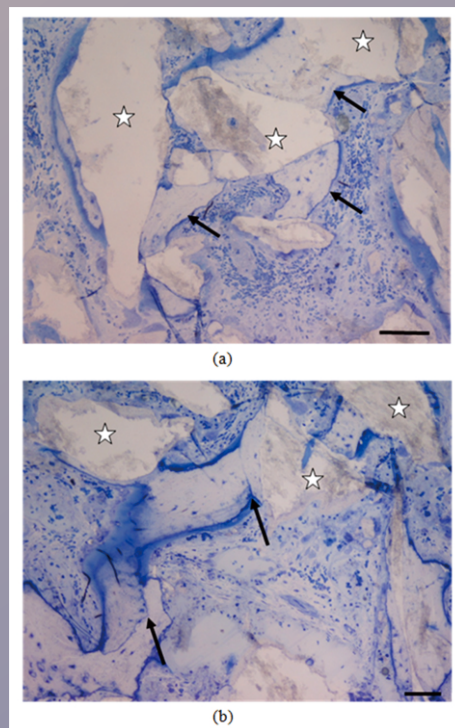


Figure 1. (a) Optical micrograph showing Osteograph[®] and PepGen P-15[®] particles (stars) linked by bone bridges (arrows) exhibiting characteristic osteocyte lacunae. Toluidin blue staining. Bar = 100 µm; (b) Optical micrograph showing new bone formations interfaced by cement lines (arrows). Stars indicate the implanted particles. Six months after implantation. Bar = 100 µm.

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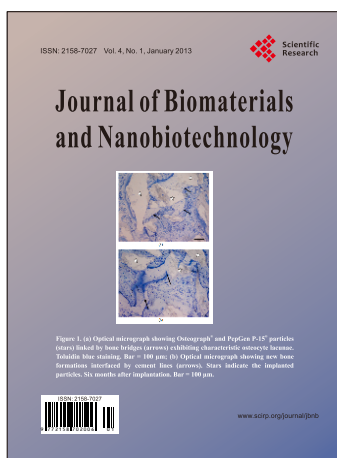
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- Nanoparticles (fullerenes, carbon nanotubes, silica based nanoparticles...) as biomarkers and fluorescent tags for cell detection, imaging and drug delivery systems
- Nanocrystals and bio-crystallization processes
- Self-assembly of biological molecules
- Bio-induced nanopatterning, arrays of biological molecules, bioships
- Biomimetics and bio-inspired materials
- Nanocapsules
- Bio-encapsulation, bio-adsorption, controlled release of biomolecules (drugs, proteins, etc.), nutraceuticals
- Nanostructured materials: micro- and nanofluidics
- Photo-induced species and structure conformations of biomolecules in biomaterials
- Bio-MEMS
- Theranostics and diagnostics tools: emerging techniques involved in bio-detection and analysis of individual biological molecules (imaging, spectroscopy, microscopy...)
- Molecular recognition techniques: biosensors
- Biomolecules/surfaces interactions studies: biocompatibility of materials, biomolecules conformations, structure and dynamics at surfaces, molecular interactions, biological activity, thermodynamics and pharmacokinetics of nanostructured materials

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