

Oxygen Releasing, Antibacterial Nanofibrous scaffolds for tissue engineering application

Tuerdimaimaiti Abudula ¹, Kalamegam Gauthaman ^{2,3}, Ahmed H. Hammad ^{1,4}, Kasturi Joshi Navare ⁵, Ahmed A. Alshahrie ^{1,6}, Sidi A. Bencherif ⁷⁻⁹, Ali Tamayol ¹⁰ and Adnan Memic ^{1,*}

¹ Center of Nanotechnology, King Abdulaziz University, Jeddah 21589, Saudi Arabia; 1202908@gmail.com (T.A.); ahhhassan@kau.edu.sa (A.H.H.); amemic@kau.edu.sa (A.M.).

² Center of Excellence in Genomic Medicine Research, King Abdulaziz University, Jeddah, Saudi Arabia.

³ Faculty of Medicine, AIMST University, Semeling, Bedong, Kedah, 08100, Malaysia; kgman@hotmail.com (K.G.).

⁴ Electron Microscope and Thin Films Department, Physics Division, National Research Centre, Dokki, Giza 12622, Egypt; ah.hammad@nrc.sci.eg (A.H.H.)

⁵ Department of Chemical Engineering, Northeastern University, Boston, MA 02115, USA; k.joshinavare@northeastern.edu (K.J.N.); s.bencherif@northeastern.edu (S.A.B.)

⁶ Department of Physics, Faculty of Science, King Abdulaziz University, Jeddah 21589, Saudi Arabia; aalshahri@kau.edu.sa (A.A)

⁷ Department of Bioengineering, Northeastern University, Boston, MA 02115, USA

⁸ Harvard John A. Paulson School of Engineering and Applied Sciences, Harvard University, Cambridge, MA 02138, USA

⁹ UMR CNRS 7338 Biomechanics and Bioengineering, University of Technology of Compiègne, Sorbonne University, 60200 Compiègne, France

¹⁰ Department of Biomedical Engineering, University of Connecticut, Farmington, CT 06030, USA; atamayol@uchc.edu (A.T)

* Correspondence: amemic@kau.edu.sa

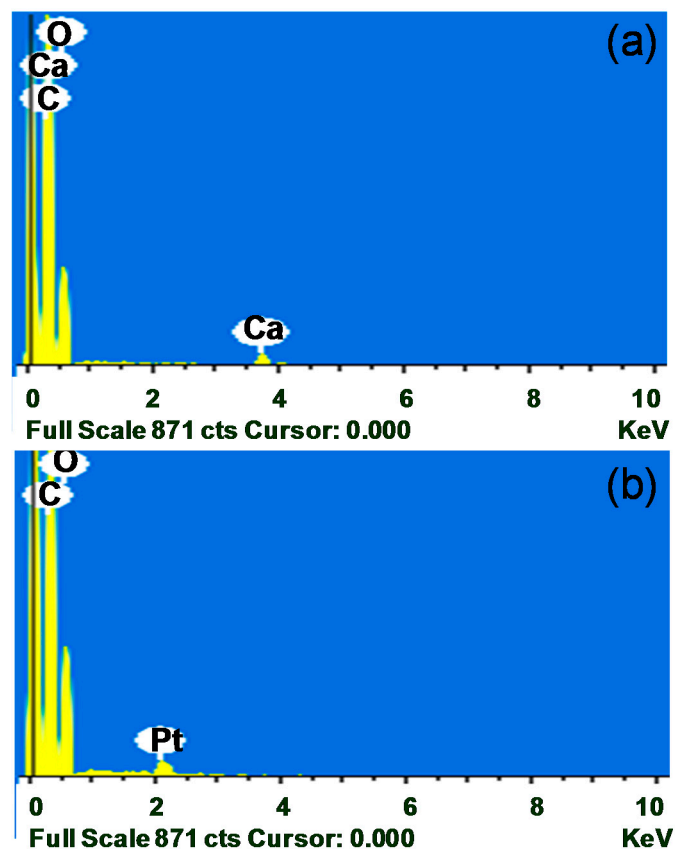


Figure S1. EDX spectra of the composite scaffolds before (a) and after (b) degradation in PBS. The results demonstrate complete release of CP from the scaffolds.

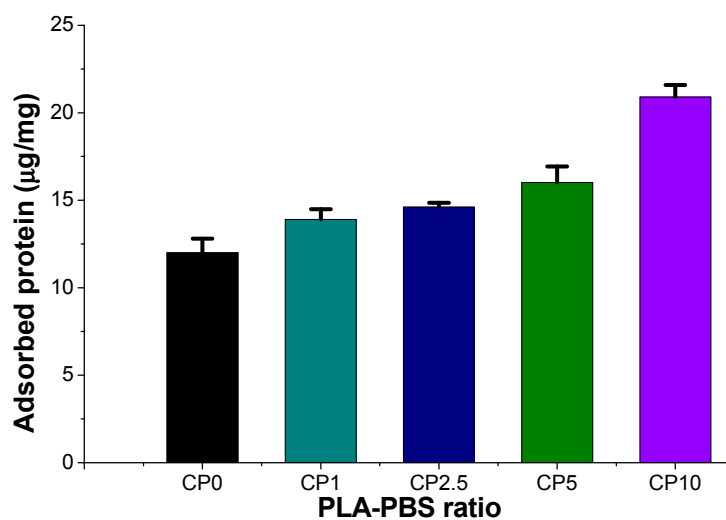


Figure S2. Protein adsorption capacity of the scaffolds, the data presented indicates the amount of adsorbed protein in each milligram of loaded scaffolds.

