Supporting Information for

Electrodeposition on nanofibrous polymer scaffolds: Rapid mineralization, tunable calcium phosphate composition and topography

By Chuanglong He, Guiyong Xiao, Xiaobing Jin, Chenghui Sun, and Peter X. Ma*

[*] Prof. P. X. Ma, Dr. C. L. He, G. Y. Xiao, X. B. Jin, and C. H. Sun, Department of Biologic and Materials Sciences, University of Michigan, Ann Arbor, MI, 48109 (USA) E-mail: (mapx@umich.edu)

Prof. P. X. Ma
Department of Biomedical Engineering
Macromolecular Science and Engineering Center
University of Michigan
Ann Arbor, MI, 48109 (USA)

Dr. C. L. He
State Key Laboratory for Modification of Chemical Fibers and Polymer Materials
College of Chemistry and Chemical Engineering and Biological Engineering
Donghua University
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1. The SEM micrographs of nanofibers electrospun from various PLLA concentrations.

**Figure S1.** The SEM micrographs of nanofibers electrospun from various PLLA concentrations: (a) 6 wt%, (b) 8 wt%, (c) 10 wt%, and (d) 12 wt%.
2. The EDX spectra indicating the Ca/P atomic ratios of deposits formed at different temperatures.

![Figure S2](image)

**Figure S2.** The EDX spectra of deposits formed at different temperatures at 3V for 60 min. (a) nest-like phase with Ca/P = 1.03 (25°C), (b) flake-like phase with Ca/P = 1.20 (60°C), (c) needle-like phase with Ca/P = 1.56 (80°C) phases.
3. The SEM/EDS elemental mapping for Ca, P, C, and O in needle-like HA phase deposited at 80°C and 3V for 60 min.
Figure S3. SEM-EDS elemental mapping for Ca, P, C, and O in needle-like HA phase deposited at 80°C and 3V for 60 min. (a) SEM micrographs of needle-like HA, (b) Ca Kα mapping, (c) P Kα mapping, (d) C Kα mapping, (e) O Kα mapping.

4. The ATR-FTIR spectra.

Figure S4. The ATR-FTIR spectra of PLLA pellets (as-received) and 10 wt% PLLA nanofibrous scaffolds electrodeposited at 60°C and 3V for 0, 30, 45, 60 min. The mineralized samples were treated by ultrasonic separation method to remove the apatite coatings before FTIR analysis.