Supplementary Information

Accelerate Fabrication of Antibacterial and Osteoinductive Electrospun Fibrous Scaffolds via Electrochemical Deposition

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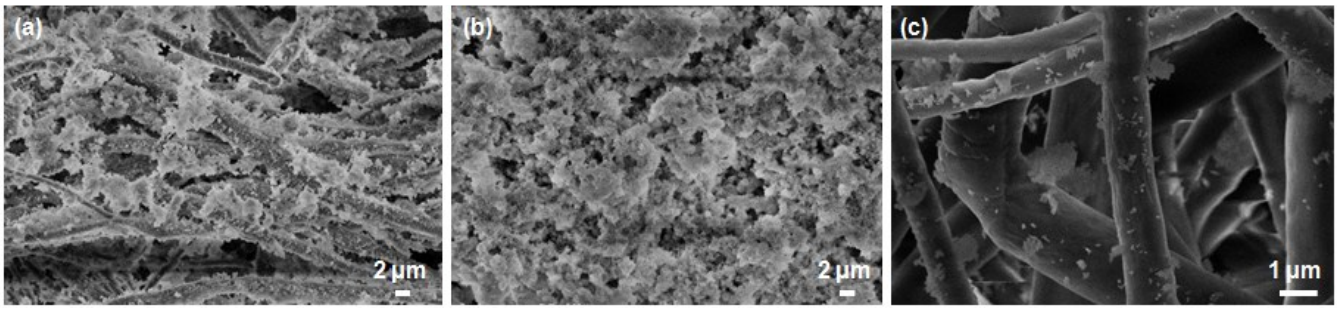

Fig. S1 SEM micrographs of calcium phosphate deposited on fiber surface in ED electrolyte of different Ca^{2+} concentration: (a) 42 mmol/L; (b) 16.7 mmol/L; (c) 5 mmol/L.

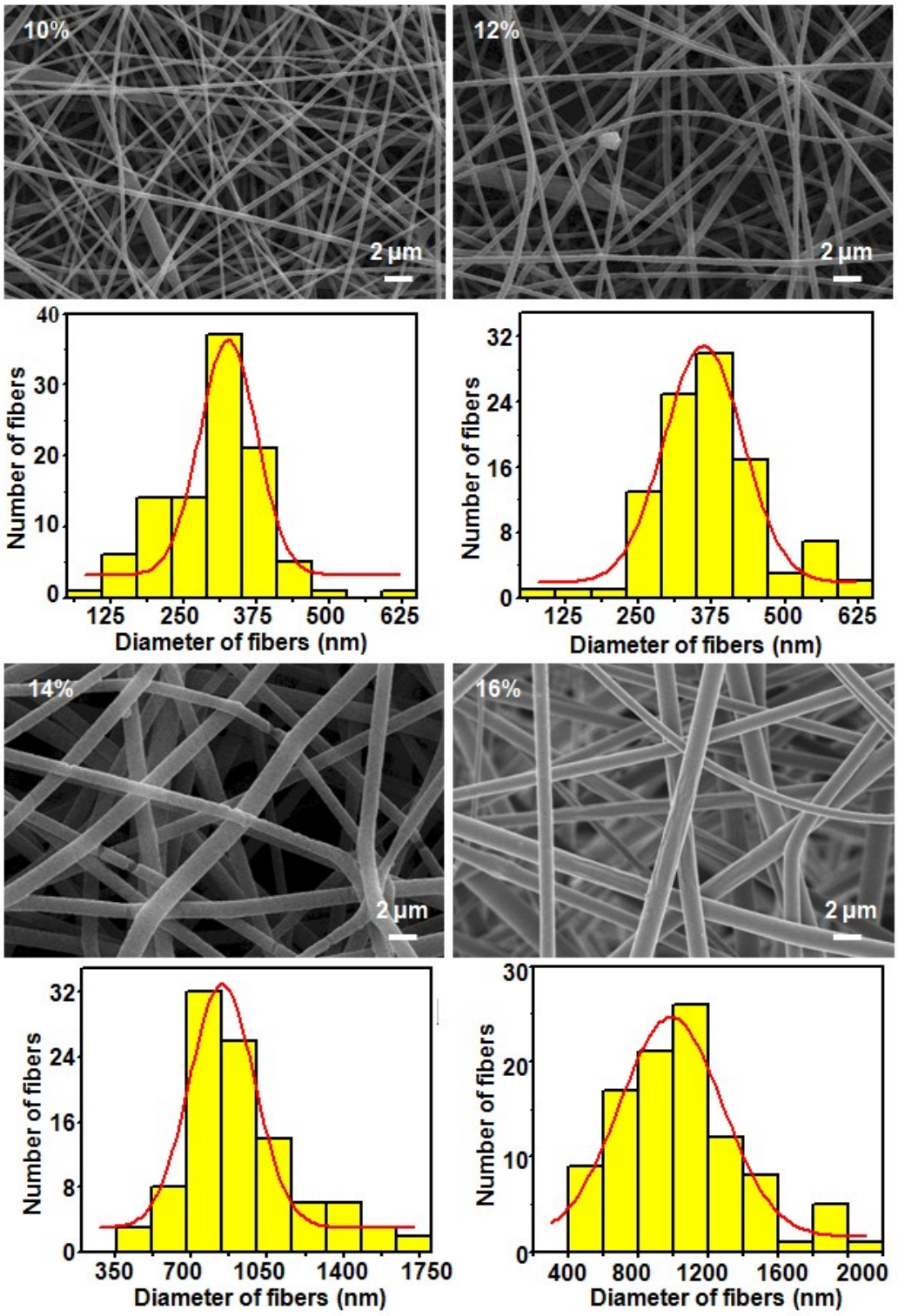

Fig. S2 SEM and diameter profiles of PLLA fabricated at different concentrations.

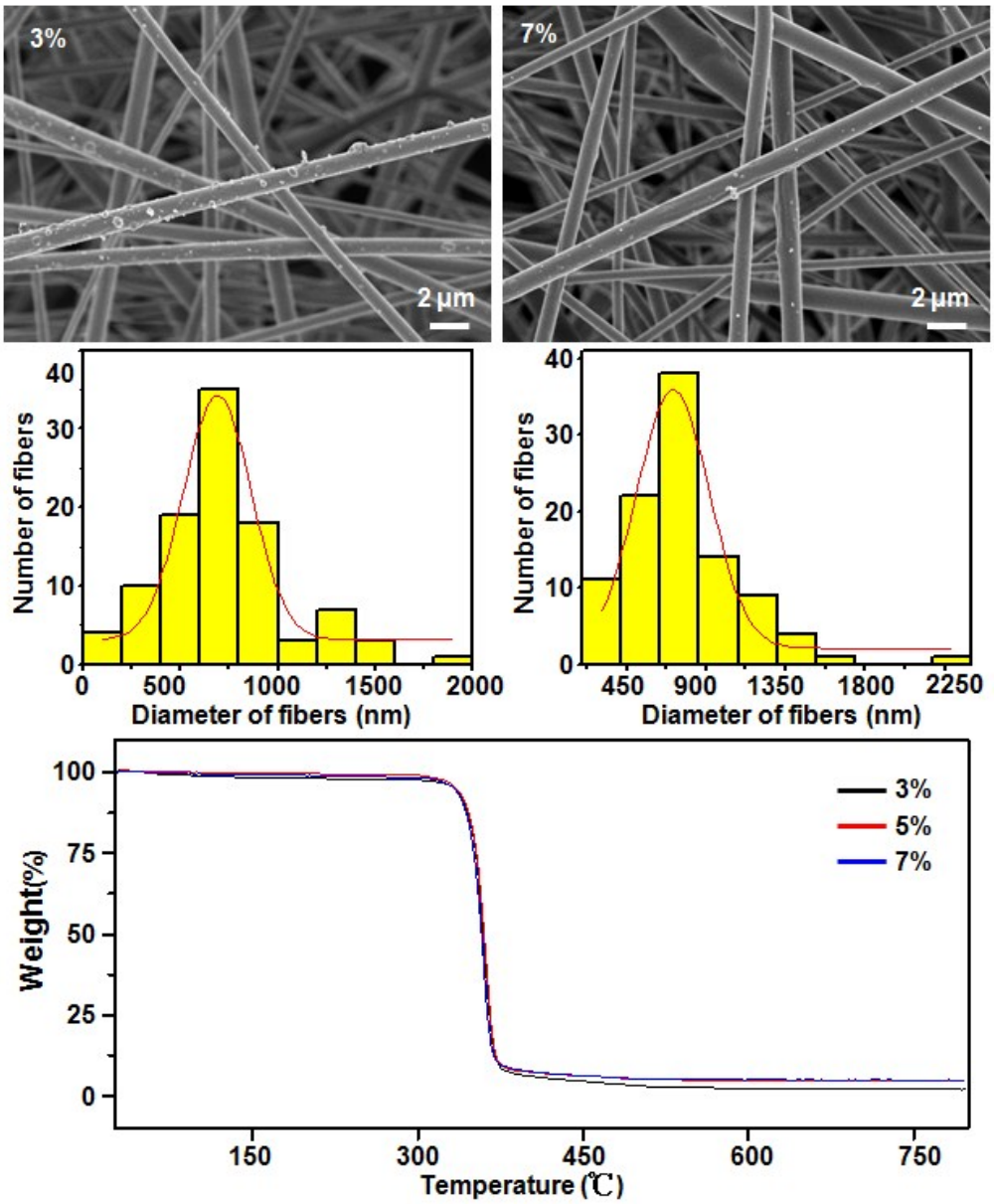

Fig. S3 The morphology, diameter distribution and TG graph of fibers with various nano-Ag concentrations.

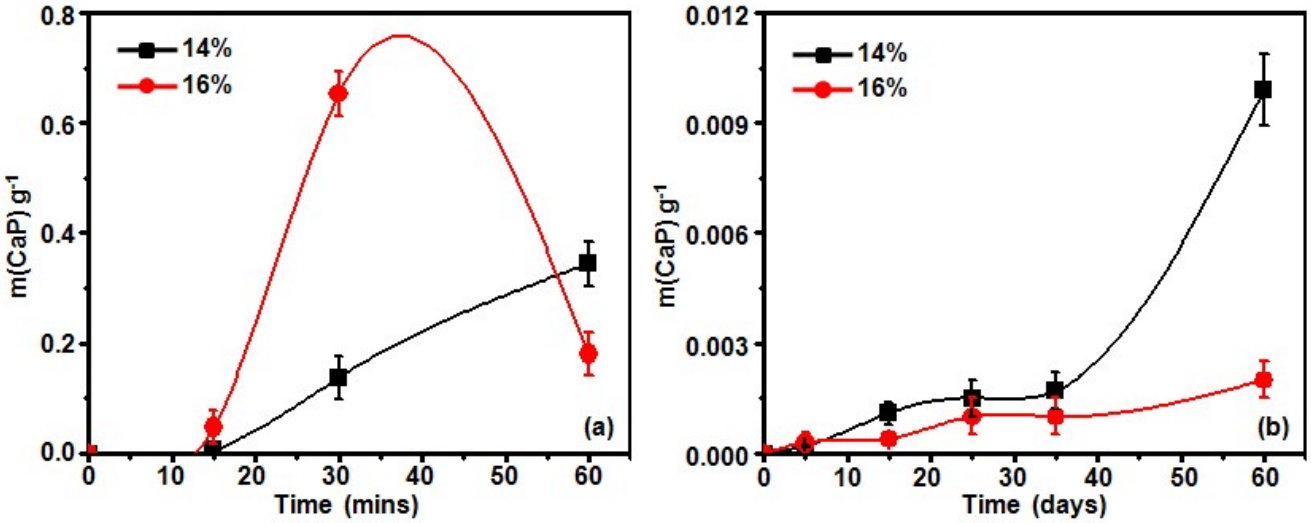

Fig. S4 The content of calcium phosphate content on the surface of PLLA fiber with PLLA concentration 14% and 16% in process of (a) ED; (b) SCPS.

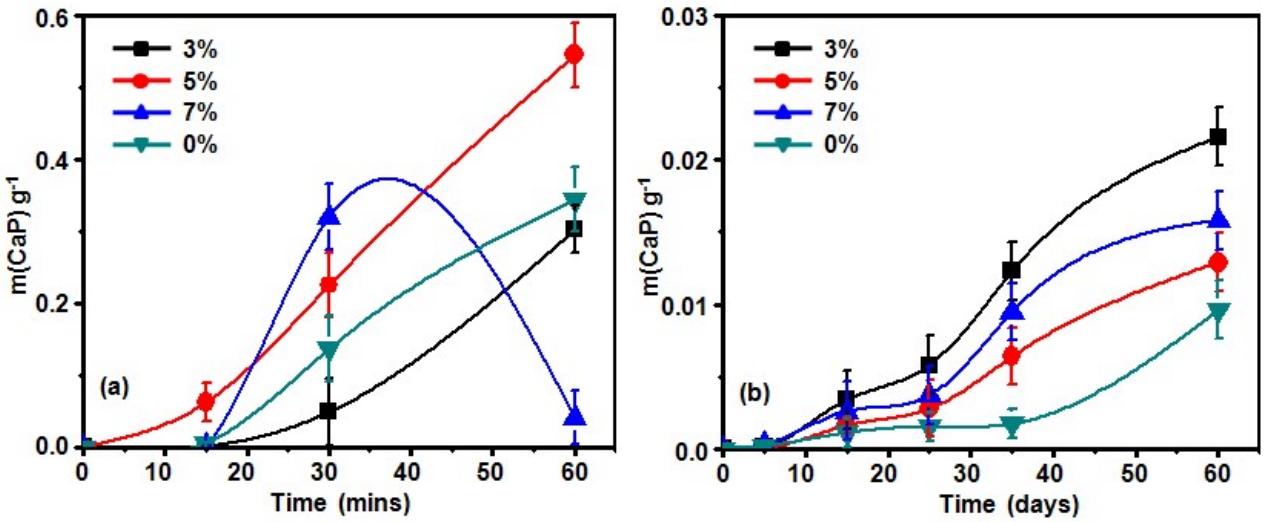

Fig. S5 The content of calcium phosphate content on the surface of PLLA fiber with 0, 3, 5 and 7 % nano-Ag in process of (a) ED; (b) SCPS.

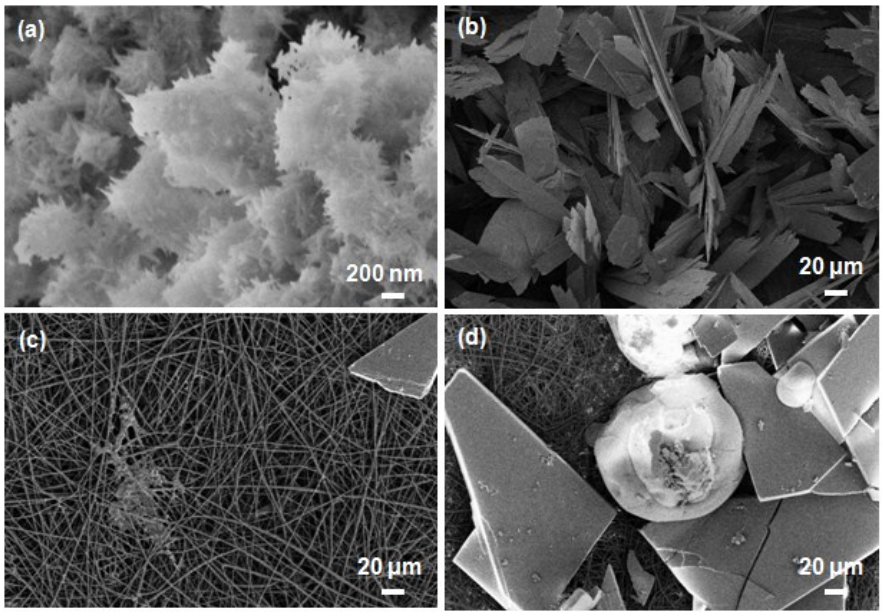

Fig. S6 SEM of mineralized composite fibers: (a) PLLA, ED; (b) PLLA/Ag, ED; (c) PLLA, SCPS; (d) PLLA/Ag, SCPS.

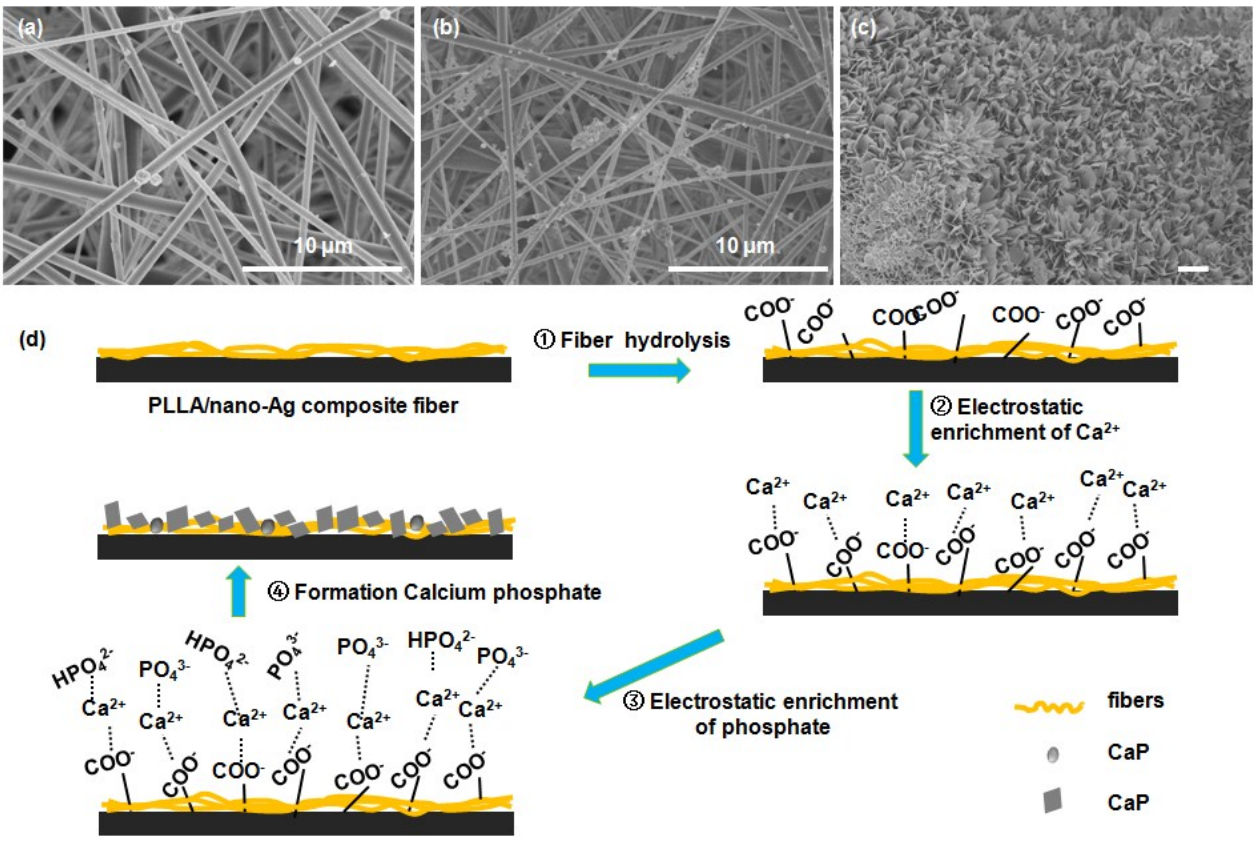

Fig. S7 SEM of composite fiber with different deposition time. (a) 3 d; (b) 7 d; (c) 12 d; (d) deposition mechanism.

Table S1. Ion concentrations of SCPS.

Ions	Na^+	Ca^{2+}	Cl^-	HPO_4^{2-}
concentrations ($mmol \cdot L^{-1}$)	142.0	12.5	217.0	5.0

Table S2. The working parameters of AAS.

Element	Wave length (nm)	Bandwidth spectrum (nm)	Lamp electric current (mA)	Air pressure (MPa)	Ethyne of flux ($L \cdot min^{-1}$)
Ca	422.7	0.5	5	0.2	1.2
Ag	328.1	1.3	9	0.16	15