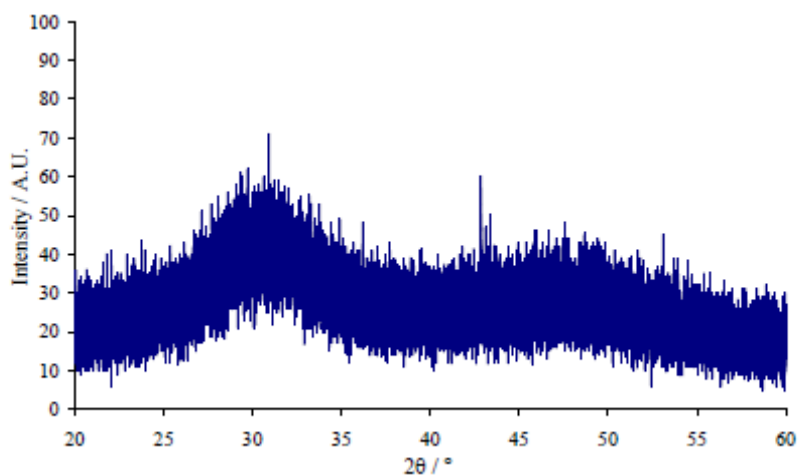


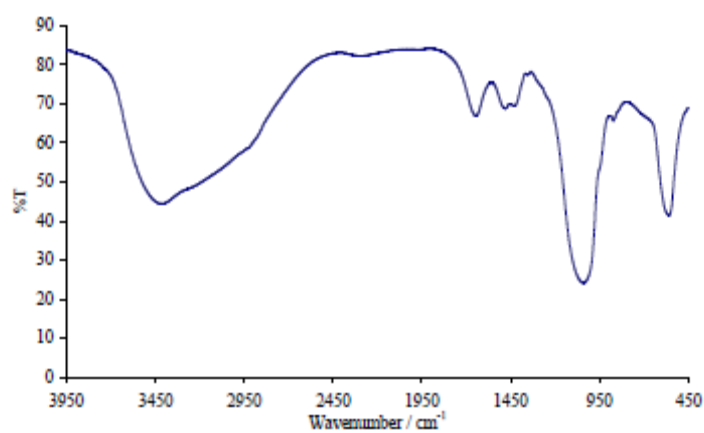
Electronic Supporting Information

Remineralization of Eroded Dental Enamel and Occlusion of Dentine Tubules using Electrospun Mats of Poly(vinyl pyrrolidone) / Amorphous Calcium Phosphate Nanofibres

J. Fletcher, D. Walsh, C. E. Fowler, and S. Mann



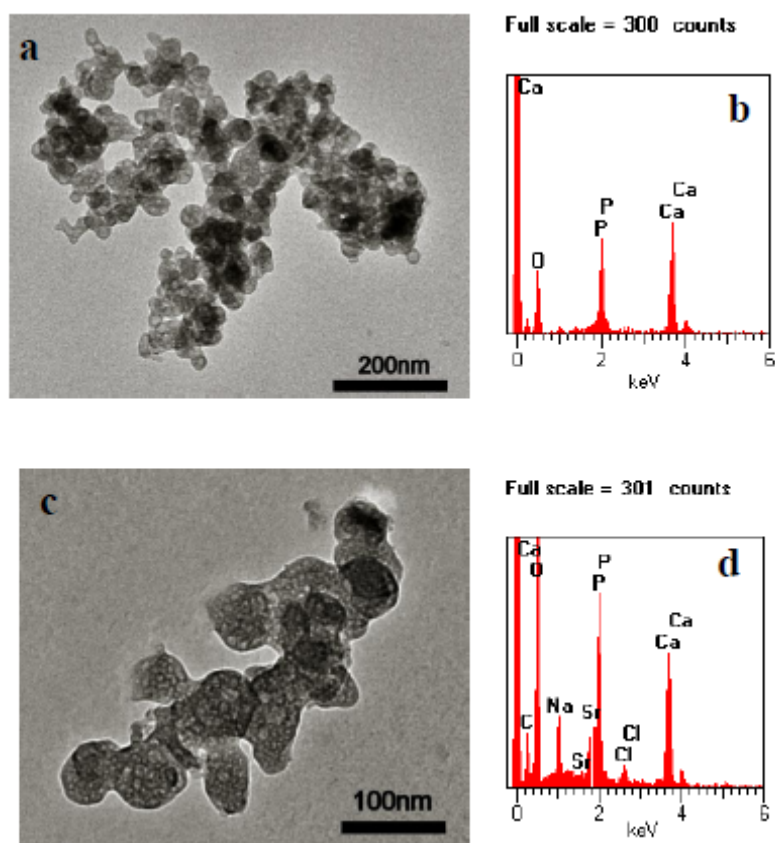
Electronic Supporting Information Fig.S1. PXRD profile of ACP nanoparticles.



Electronic Supporting Information Fig.S2. FTIR spectrum of ACP nanoparticles.

Wavenumber / cm^{-1}	Assignment
3412	OH
2291	CH_2 stretching
1648	H_2O
1489	CH_2 scissor
1037	PO_4^{3-}
873	C-O stretch
561	PO_4^{3-}

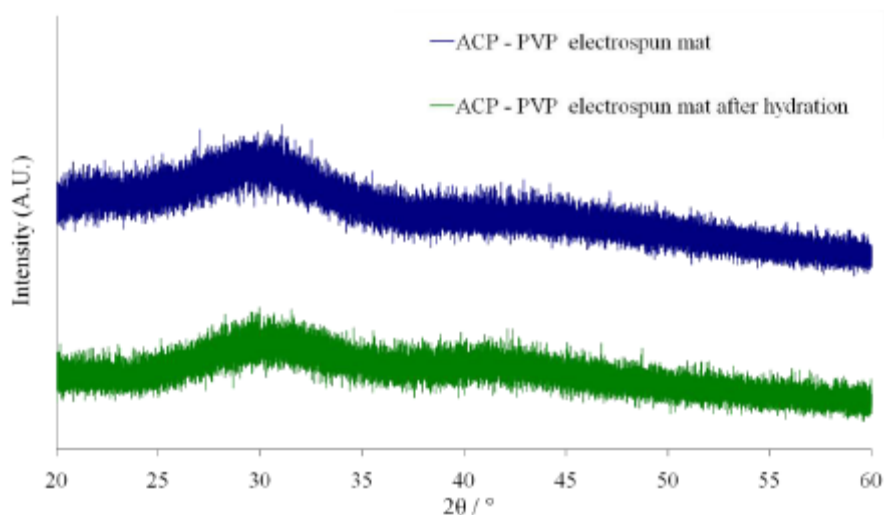
Electronic Supporting Information Table S1. Assignment of the peaks in the FTIR spectrum of ACP.



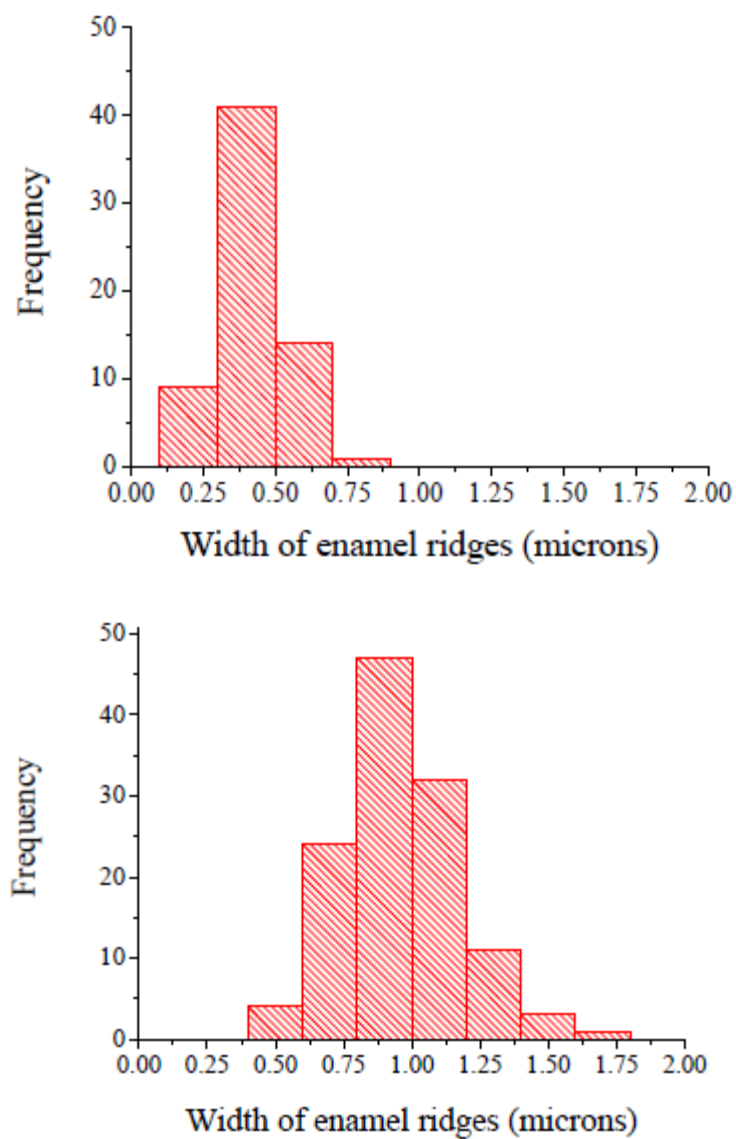
Electronic Supporting Information Fig.S3. (a) TEM image of ACP particles and (b) corresponding EDXA spectrum, (c) TEM image of Sr-ACP particles and (d) corresponding EDXA spectrum showing presence of Sr.

Miller indices	Experimental value / Å			Literature value / Å
	Enamel	Etched enamel	Etched enamel treated with ACP/PVP mat	
(002)	3.35	3.36	3.39	3.440
(102)	-	-	3.12	3.17
(211)	2.79	2.73	2.74	2.814
(112)				2.778
(300)				2.720
(202)	2.59	2.59	2.60	2.631
(210)	-	-	2.27	2.262
(400)	-	2.04	2.04	2.04
(222)	1.92	1.93	1.93	1.943
(312)	1.88	1.88	1.88	1.890
(213)	1.82	1.82	1.83	1.841
(402), (303)	-	1.74	1.75	1.754
(004), (411)	-	1.71	1.71	1.722

Electronic Supporting Information Table S2. PXRD data for native enamel, citric acid-etched enamel, and acid-etched treated with with a hydrated ACP/PVP electrospun mat.



Electronic Supporting Information Fig. S4. PXRD profiles of ACP/PVP samples before and after electrospinning..



Electronic Supporting Information Fig. S5. Size distribution of dental enamel ridges before (a) and after (b) treatment with 25wt% Sr-ACP-PVP electrospun mat.