

Supplementary Information

Galvanic Deposition of Calcium Phosphate/Bioglass Composite Coating on AISI 316L

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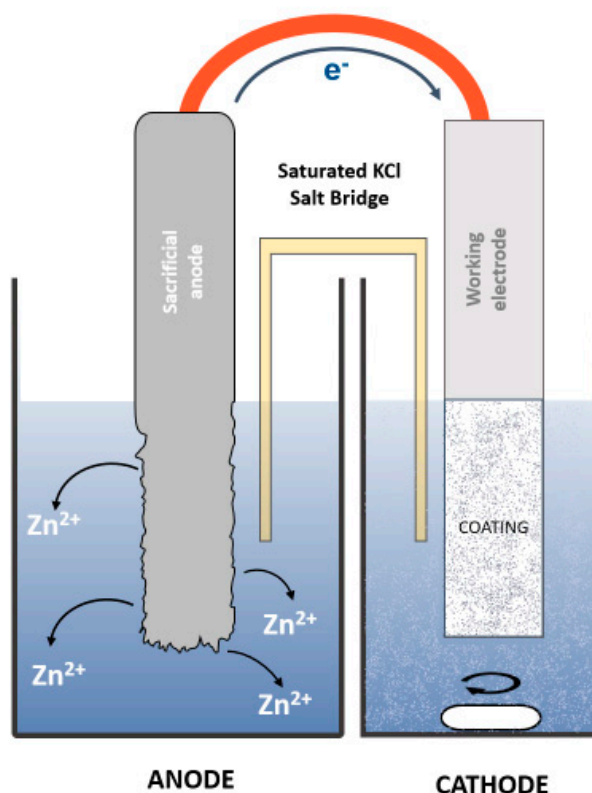


Figure S1. Cell layout.

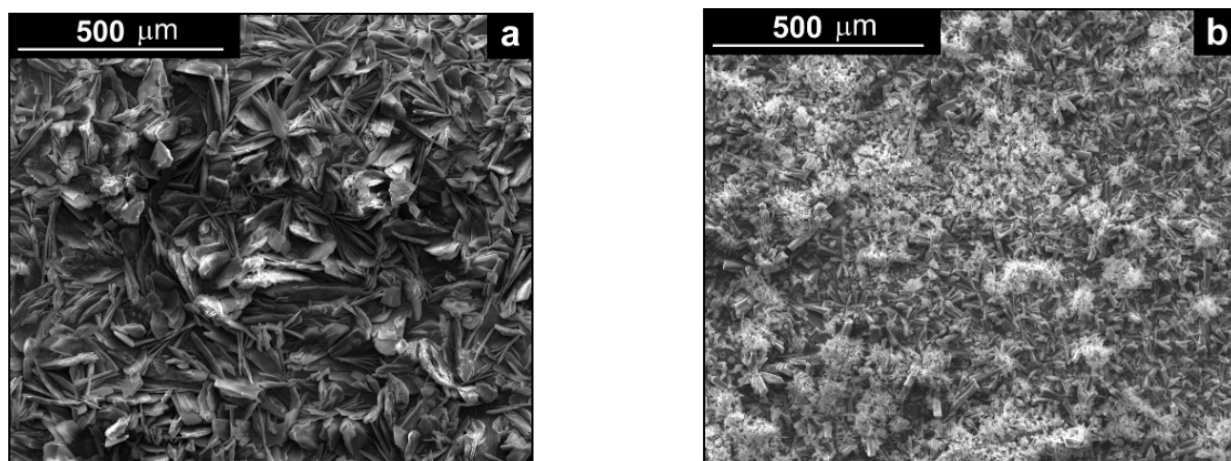


Figure S2. SEM images of CaP coatings obtained by galvanic deposition at different conditions: (a) unstirring, (b) and stirring.

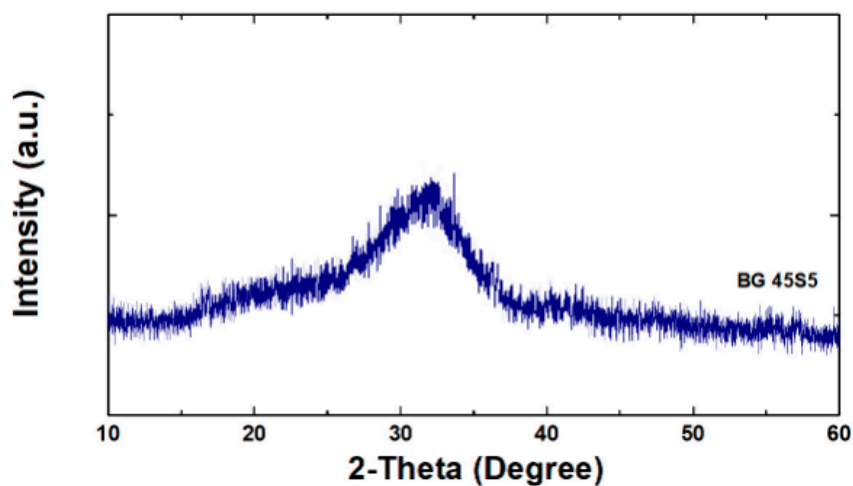


Figure S3. XRD pattern of Bioglass 45S5 powder.

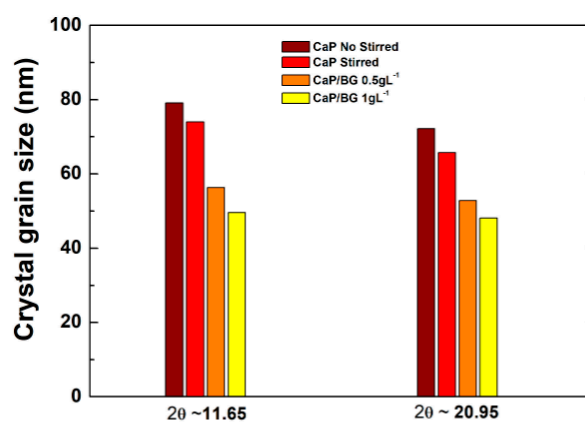


Figure S4. Grain size calculated by Scherrer's equation at 2θ degree equal to 11.65 and 20.95.

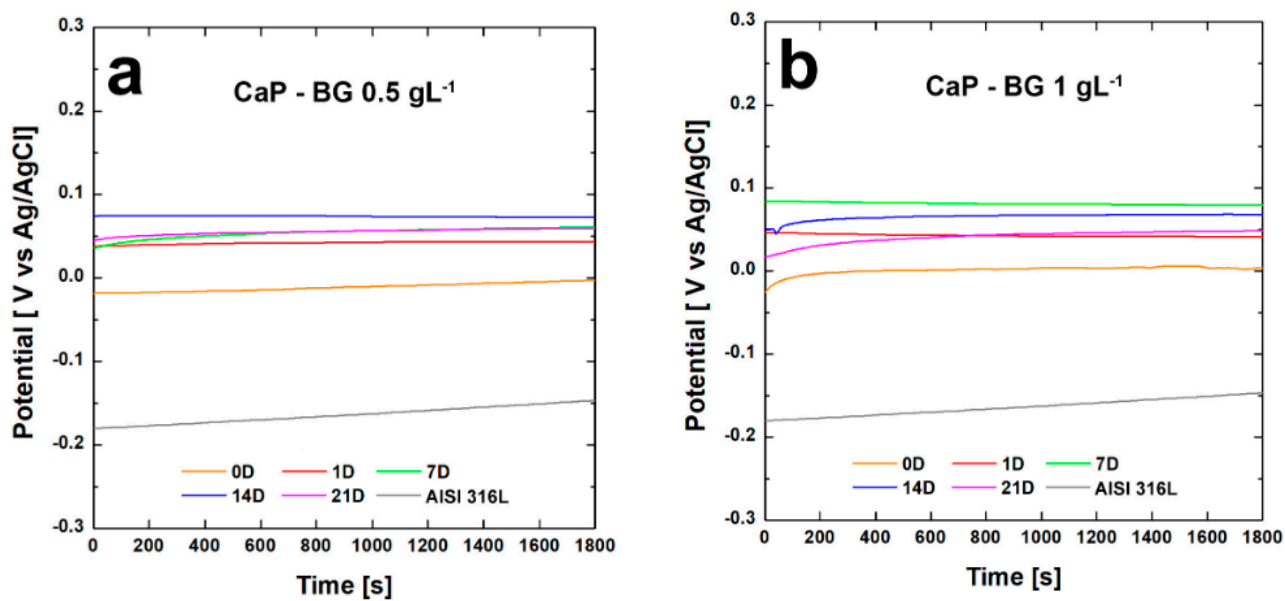


Figure S5. OCP curves of (a) CaP-BG 0.5 gL⁻¹ (b) CaP-BG 1 gL⁻¹.

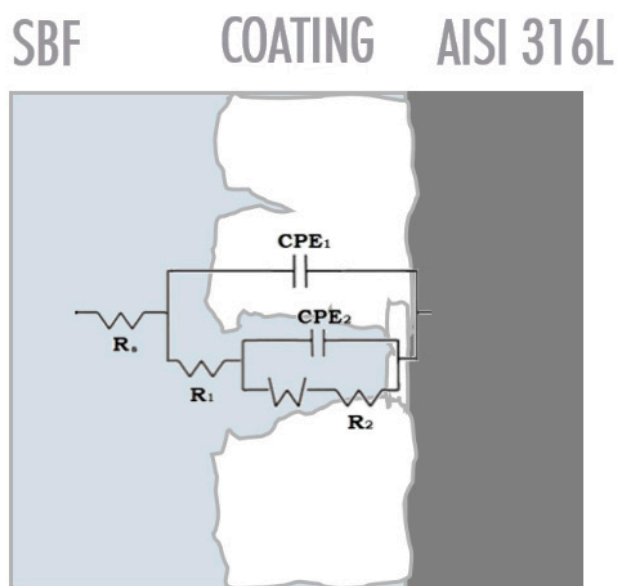


Figure S6. Equivalent Circuit used for the fitting of EIS data.

Table S1. Composition of SBF.

Reagent	Composition (gL ⁻¹)
NaCl	5.403
NaHCO ₃	0.74
Na ₂ CO ₃	2.046
K ₂ HPO ₄ 3H ₂ O	0.23
MgCl ₂ 6H ₂ O	0.31
HEPES	11.93
CaCl ₂	0.29
Na ₂ SO ₄	0.072
1M NaOH	0.8 mL

Table S2. Fitting parameters of EIS data obtained for CaP-BG 1gL⁻¹.

	0	1	7	14	21	AISI 316L
	R(Q(R(Q(RW))))					R(QR)
R _s	50	51.85	39.18	17	15	38
CPE ₁ -Y	1.48×10^{-8}	2.44×10^{-5}	3.86×10^{-6}	6.04×10^{-6}	2.23×10^{-6}	-
CPE ₁ -n	0.972	0.5495	0.5526	0.5191	0.5679	-
R ₁	82.08	1059	5029	1816	2256	-
CPE ₂ -Y	7.84×10^{-6}	9.01×10^{-7}	1.56×10^{-5}	6.75×10^{-6}	4.46×10^{-5}	8.71×10^{-6}
CPE ₂ -n	0.6564	0.9214	0.6214	0.8176	0.5124	0.895
R ₂	1.94×10^4	5.09×10^4	9.04×10^4	1.10×10^4	3.57×10^4	7.54×10^4
W	2.37×10^{-5}	1.50×10^{-5}	2.21×10^{-6}	3.33×10^{-5}	1.52×10^{-6}	-