Supporting Information

A facile preparation of poly(lactic acid)/brushite bi-layer coating on biodegradable magnesium alloys with multiple functionalities for orthopedic application

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Supplementary information

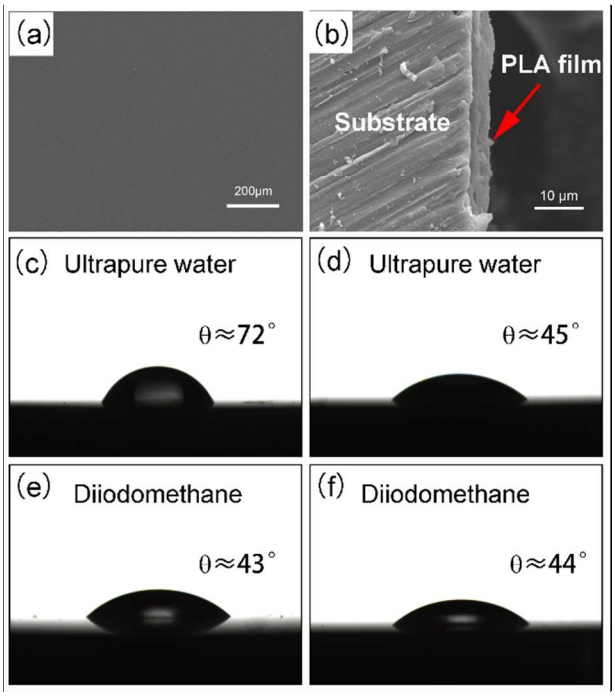

Fig. S1 (a) SEM top view and (b) cross-section view of the PLA film; and static water and diiodomethane contact angle measurements of PLA film (c, e) before and (d, f) after UV irradiation.

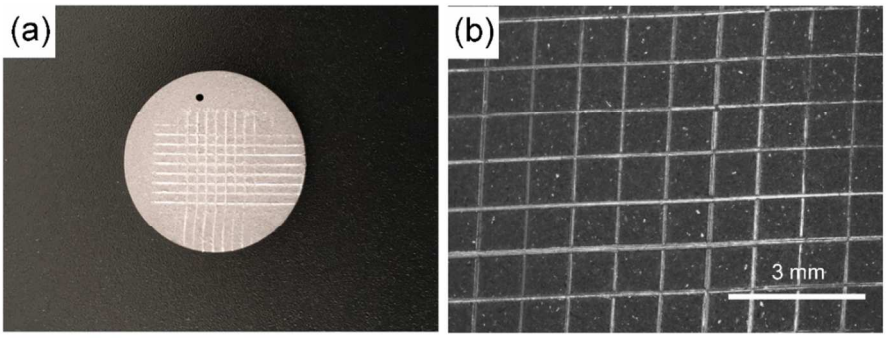

Fig. S2 Macroscopic view (a) and stereoscopic view (b) of the cross-hatch pattern area of DCPD/PLA-Mg sample after ASTM adhesion test.

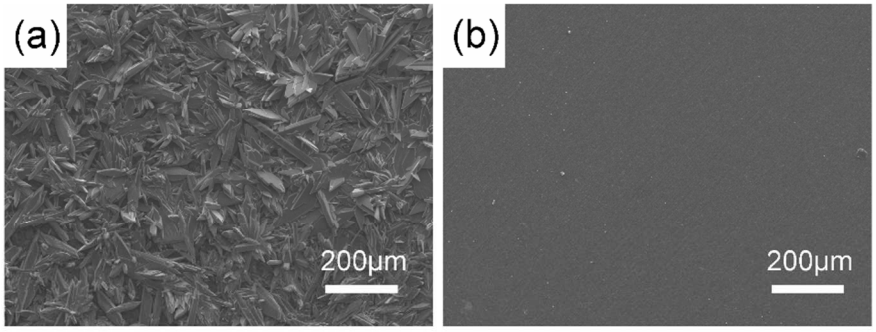

Fig. S3 SEM top-view image of deposited DCPD on PLA film with (a) and without (b) the pretreatment of UV irradiation.

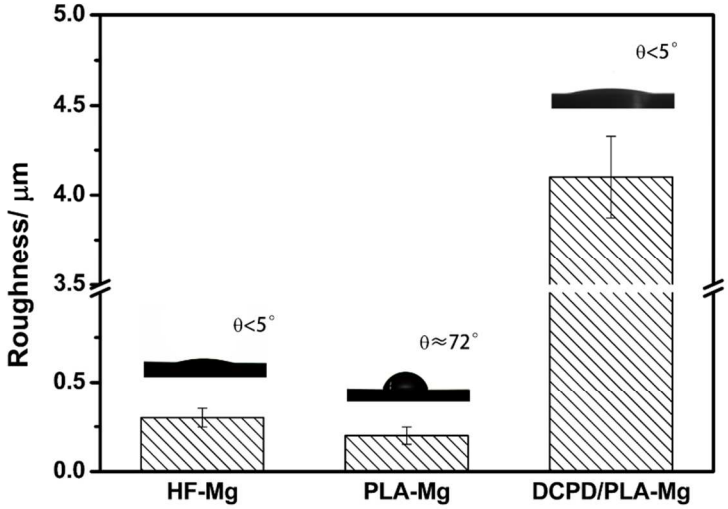

Fig. S4 Surface roughness and water contact angle measurements of HF-Mg, PLA-Mg and DCPD/PLA-Mg samples, respectively.

Table S1

Values of the long-range dispersion γ^d and the short-range polar γ^p components of the surface tension of the two liquids used in the study

Liquid	Dispersive component(γ^d, mN/m)	Polar component (γ^p, mN/m)
Ultrapure water	21.8	51.0
Diiodomethane	50.8	0