

## Supporting Information

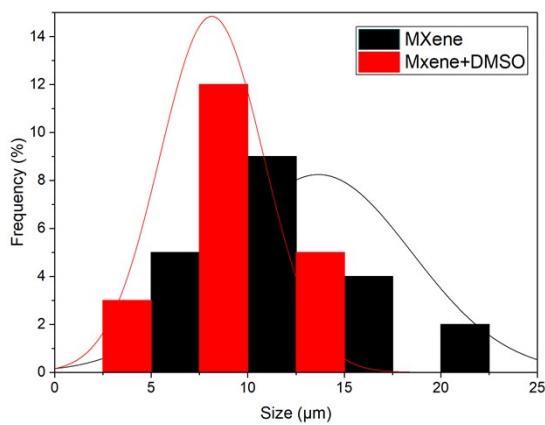
### **Polycaprolactone-MXene coating for controlling initial biodegradation of magnesium implant by Near-Infrared Light**

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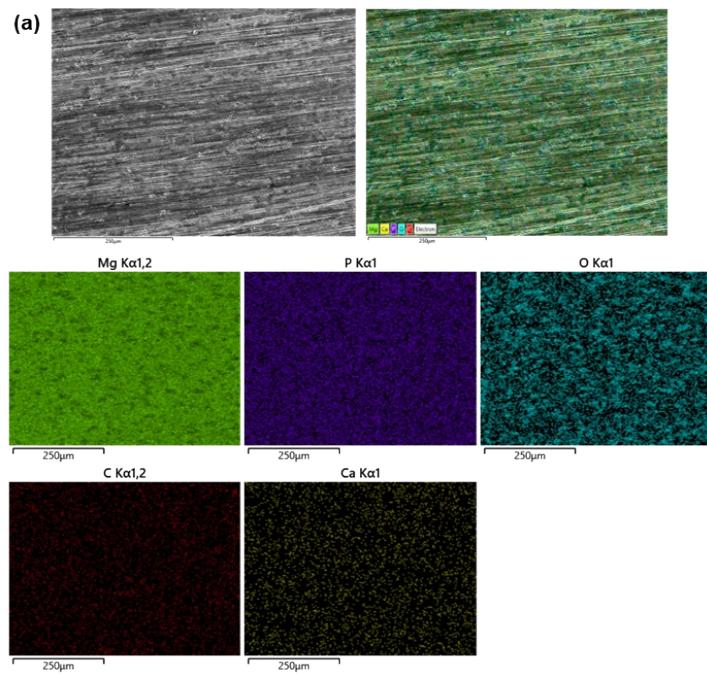
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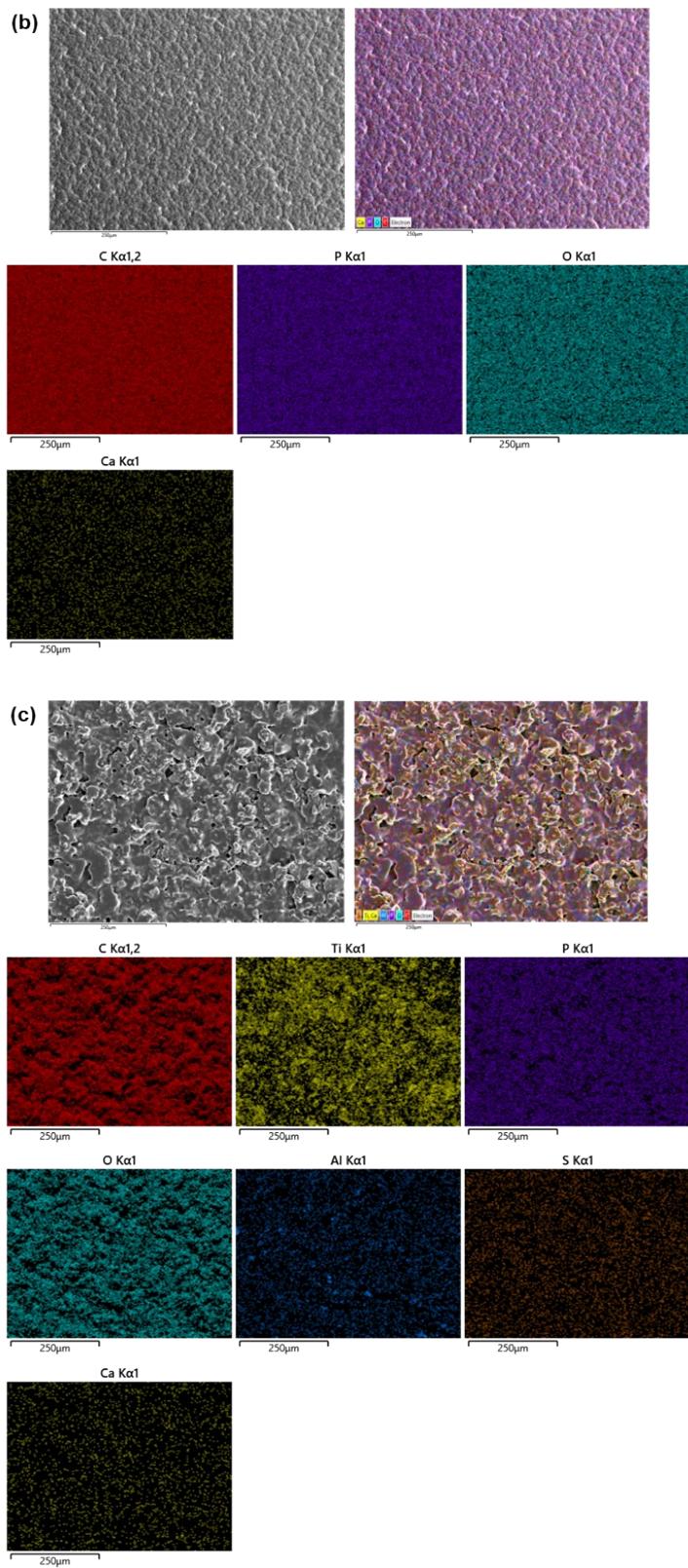
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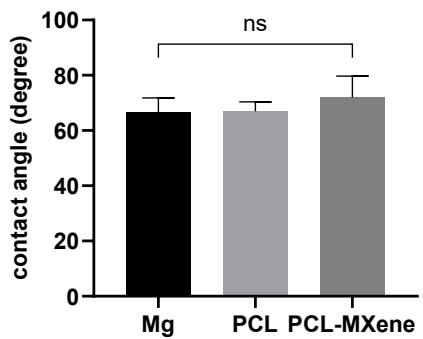


**Figure S1.** Mxene particle size distribution by different synthesis methods.

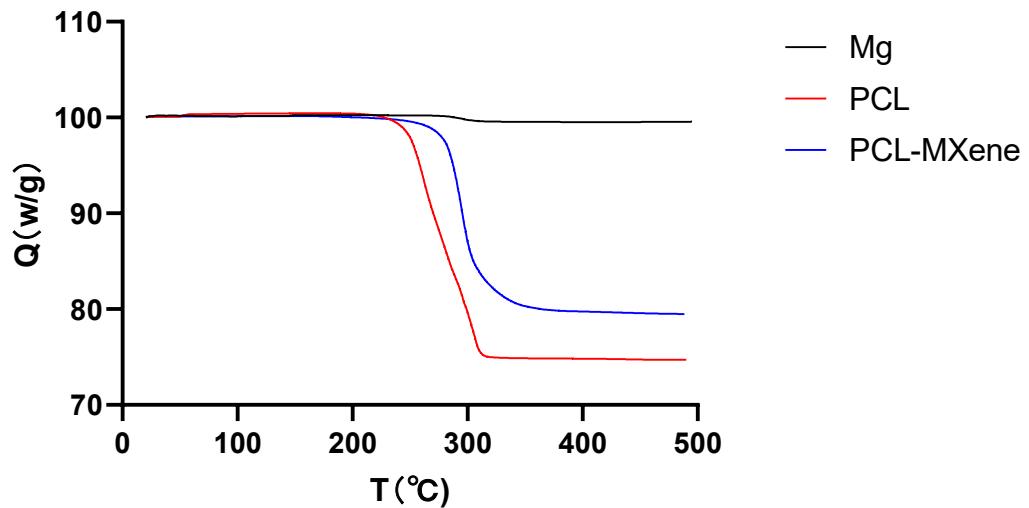




**Figure S2.** EDS map of Mg(a), PCL(b), and Mg/PCL-Mxene(c).



**Figure S3.** Contact angles of Mg, PCL, and PCL-MXene.



**Figure S4.** TGA curves of Mg, PCL, and PCL-MXene which recorded in the 10 °C to 120°C temperature range.