Electronic Supporting Information

Long-term Antibacterial Performances of the Biodegradable Polylactic Acid Materials with Directly Absorption of Antibiotic Agents

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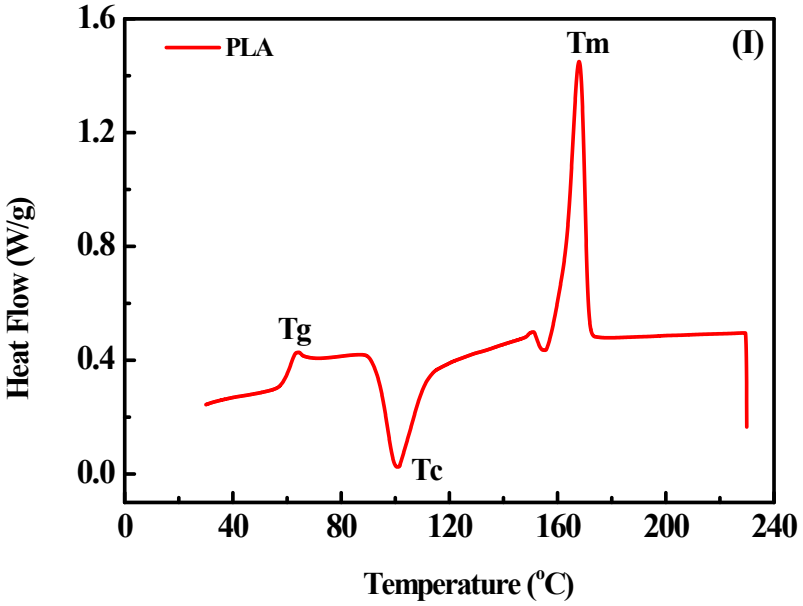
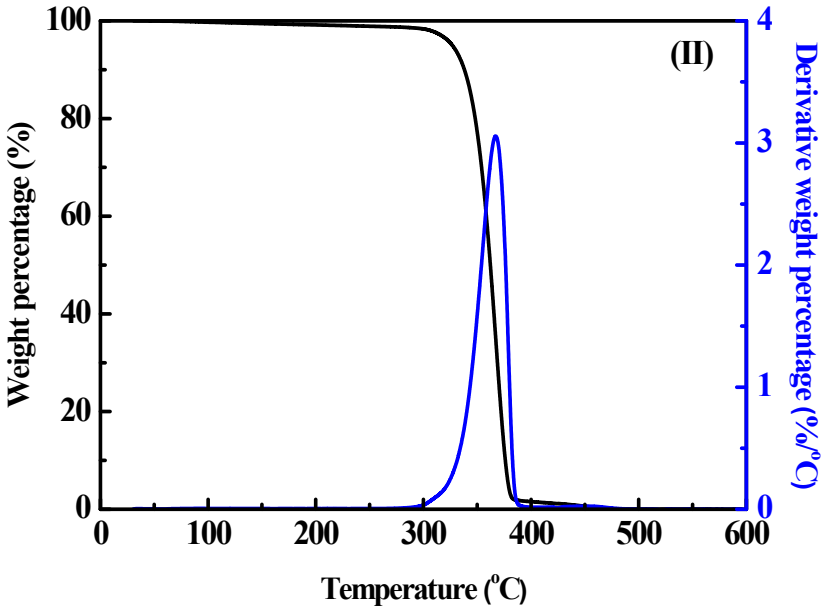

PLA
Tm
(I)
Tg
Tc
Heat Flow (W/g)
Temperature (°C)
1.6
1.2
0.8
0.4
0.0
0
40
80
120
160
200
240


(II)
Weight percentage (%)
Derivative weight percentage (%/°C)
Temperature (°C)
100
80
60
40
20
0
4
3
2
1
0
0
100
200
300
400
500
600

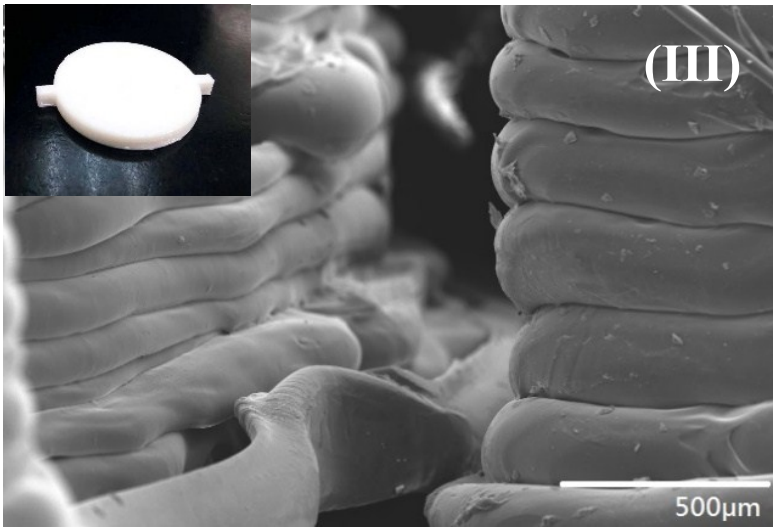


Figure S1 (I) DSC, (II) TGA and (III) SEM results of PLA materials used for the 3D printing

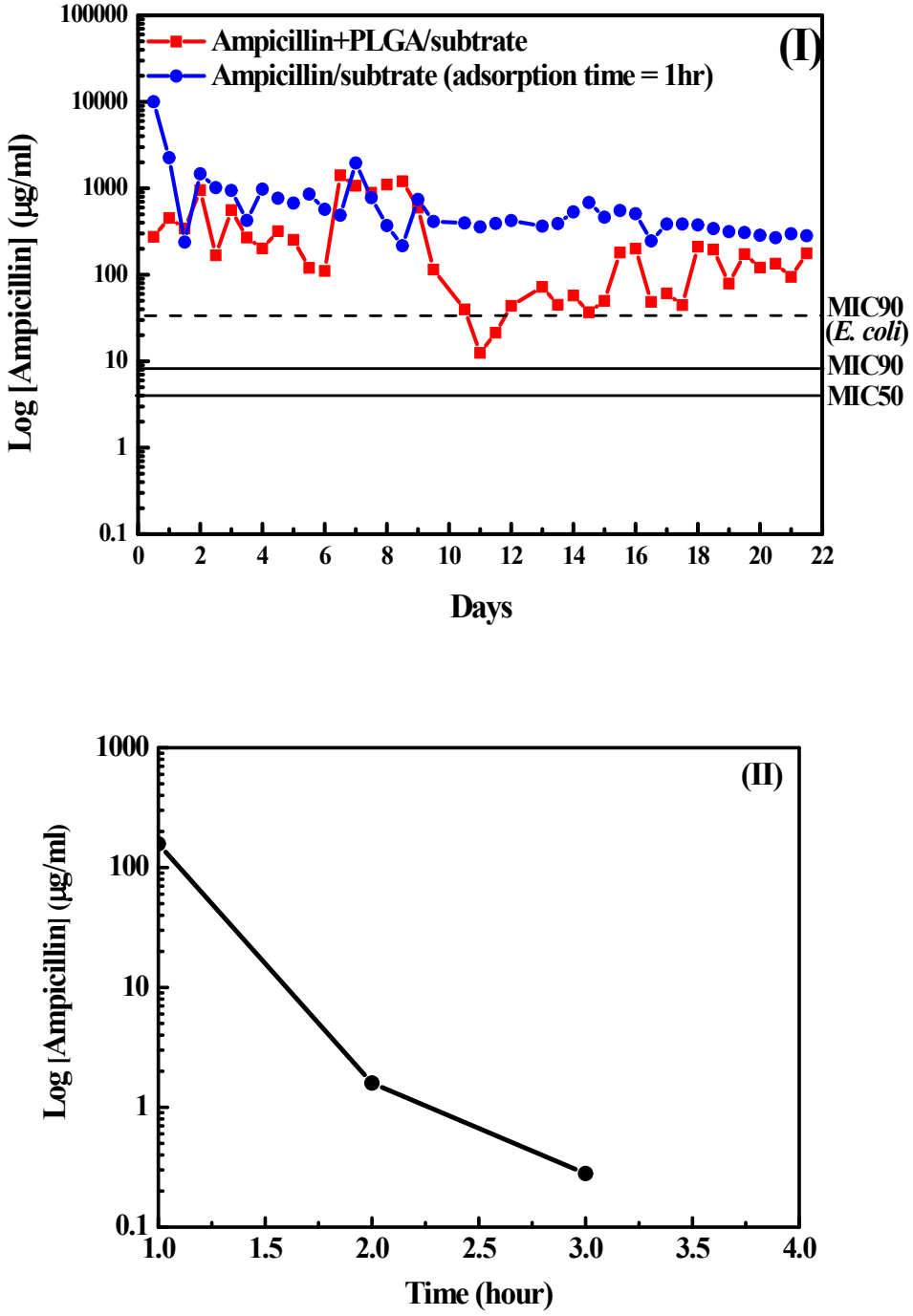


Figure S2 The release profiles of Ampicillin from (I) the PLA disk with and without the PLGA as the binder and (II) the PLA fiber in the buffer solution.

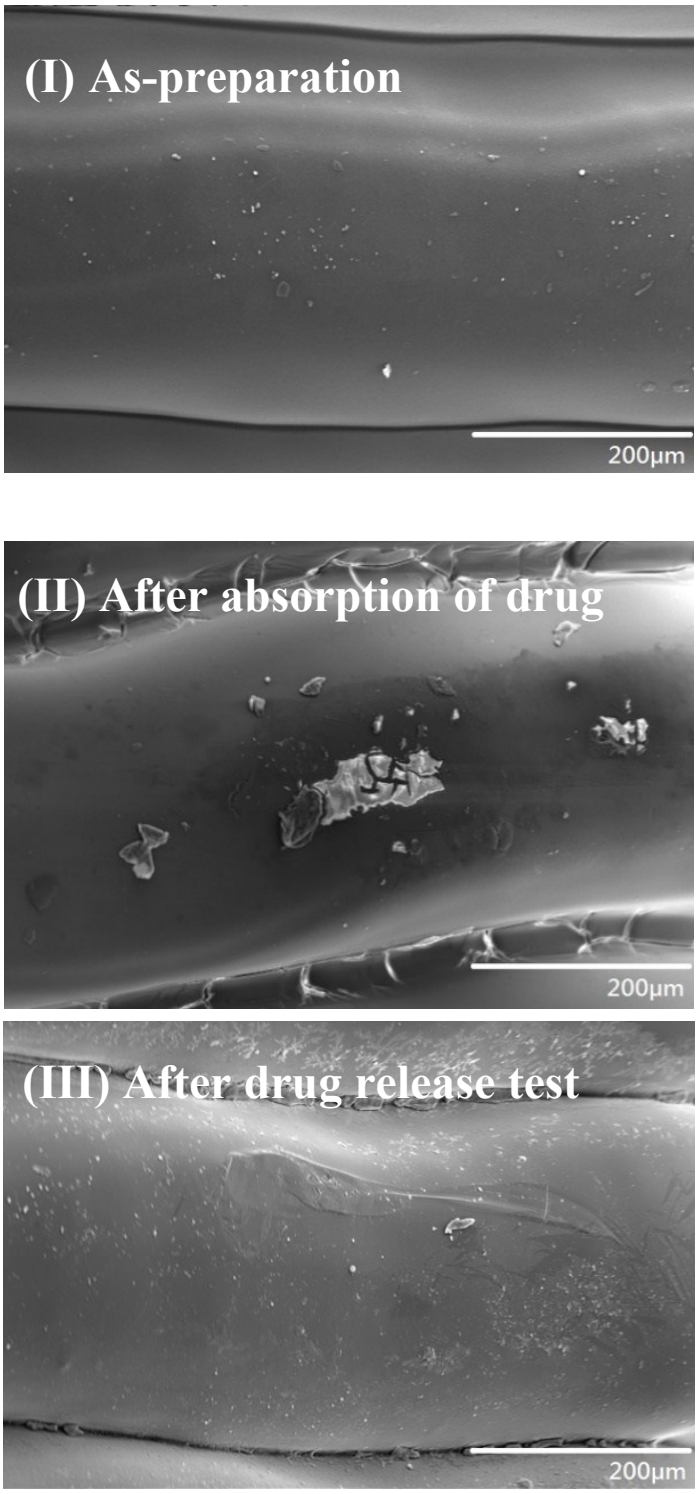


Figure S3 SEM images of the as preparation, after absorption of drug, and after drug release test for samples.

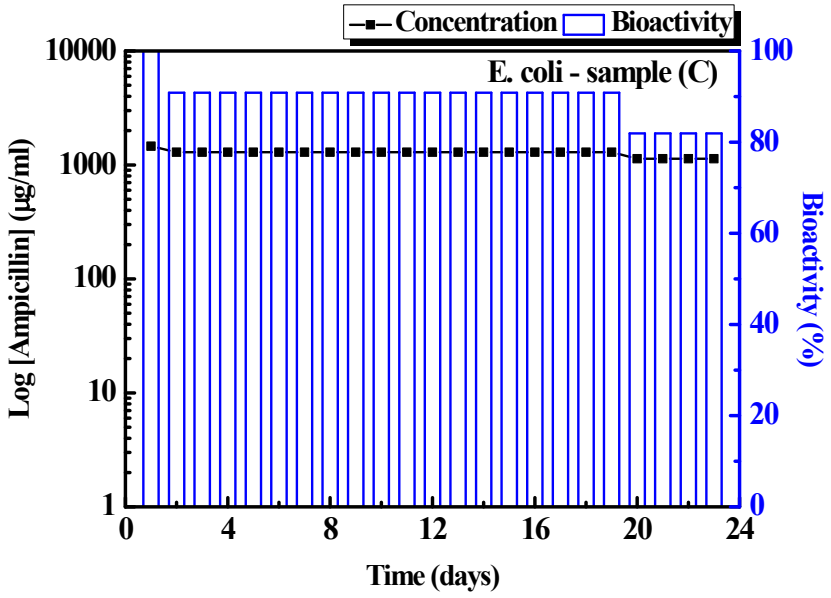


Figure S4 Bioactivity for E. coli using the release of Ampicillin from sample (C).