

Supporting Information for

Development and *In-Vitro* Biodegradation of Biomimetic Zwitterionic Phosphorylcholine Chitosan Coating on Zn1Mg Alloy

Yinying Sheng^{a,1}, Junjie Yang^{a,1}, Xueyang Zhao^a, Hui Liu^a, Shaogang Cui^{a*}, Lianxi Chen^a, Rong Zeng^b,
Xiaojian Wang^{a,c*}, Chi-Hsien Huang^d, Wei Li^{a,c*}

a) Institute of Advanced Wear & Corrosion Resistant and Functional Materials, Jinan University, Guangzhou 510632, China

b) Department of Materials Science and Engineering, College of Chemistry and Materials, Jinan University, Guangzhou 510632, China

c) National Joint Engineering Center of High-performance Wear-resistant Metallic Materials, Guangzhou 510632, China

d) Department of Material Engineering, Ming Chi University of Technology, New Taipei City 24301, Taiwan

1. Yinying Sheng and Junjie Yang contributed equally to this work.

*Corresponding authors:

Email: xiaojian.wang@jnu.edu.cn (Prof. X.J. Wang)

Email: liweijnu@126.com (Prof. W. Li)

Email: sgcui@jnu.edu.cn (Dr. S.G. Cui)

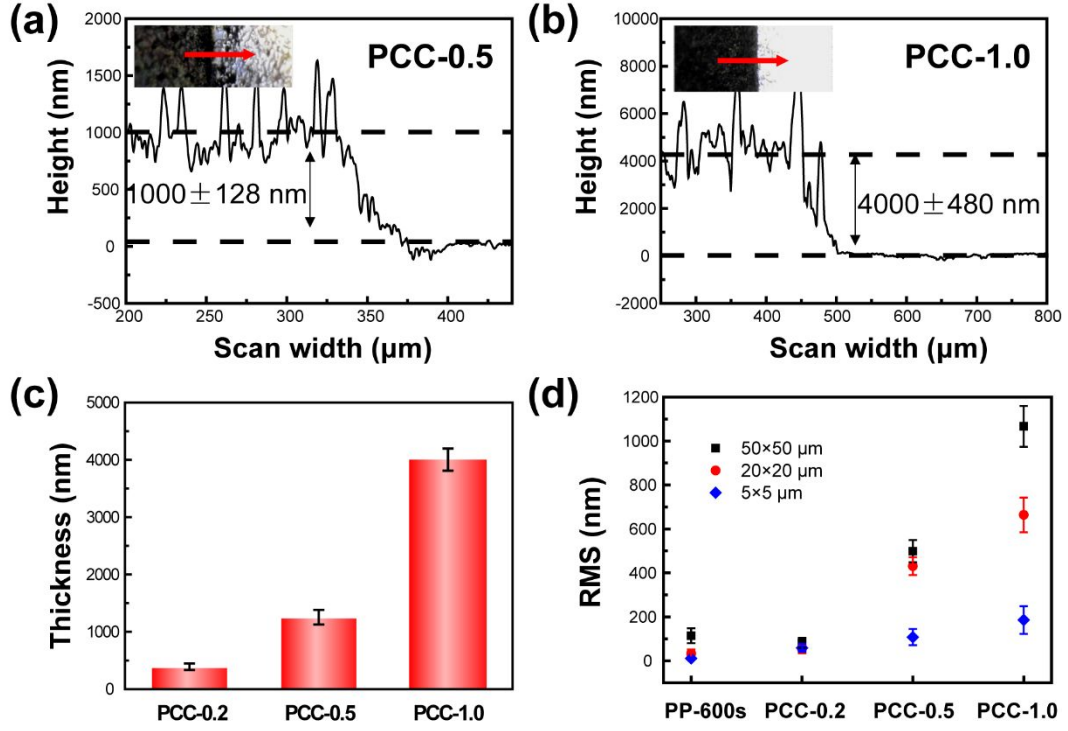


Figure S1. (a-c) The thickness of PCCs layer prepared in PCCs solution with different concentration on Zn1Mg surface tested by α -step, and (d) the surface roughness after modification by PCCs with different concentration

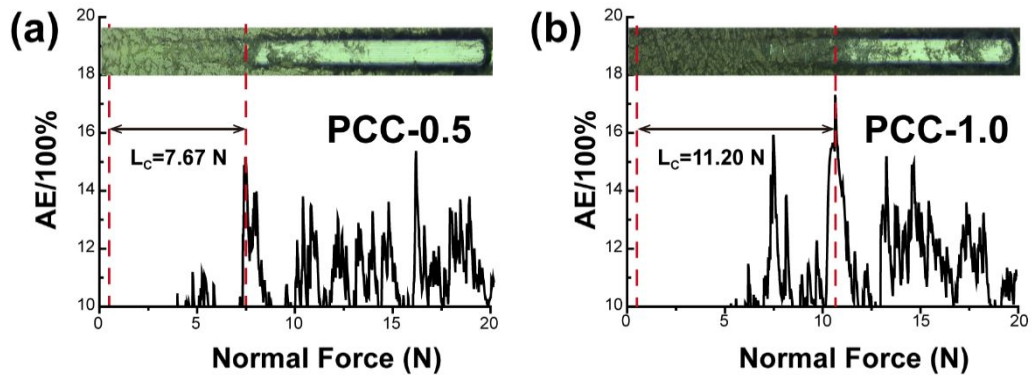


Figure S2. The adhesion strength for (a) PCC-0.5 and (b) PCC-1.0 tested by scratch test at a ramping mode from 0.5N to 20N