

## Support Information

### Multifunctional HA/Cu Nano-coatings on Titanium using PPy Coordination and Doping in Pulse Electrochemical Polymerization

Yingbo Wang,<sup>a1\*</sup> Ling Yan,<sup>a1</sup> Ruoyu Cheng,<sup>b1</sup> Mirigul·Muhtar,<sup>a</sup> Xinxin Shana, Yi

Xiang,<sup>b</sup> Wenguo Cui<sup>b\*</sup>

<sup>a</sup> College of Chemical Engineering, Xinjiang Normal University, 102 Xinyi Road,  
Urumqi, 830054, Xinjiang, China.

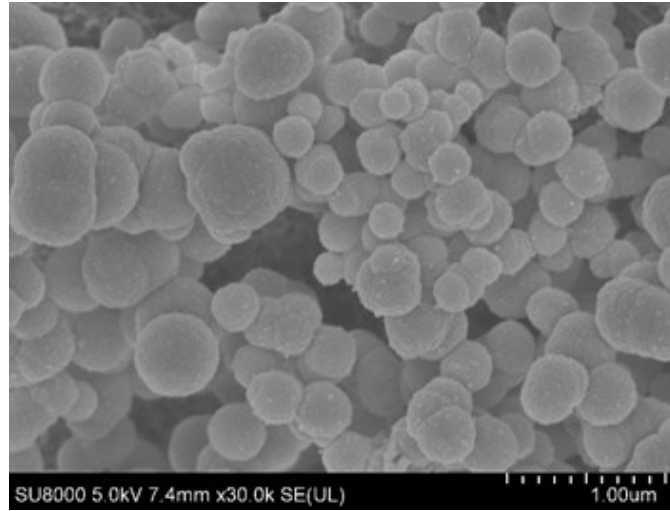
<sup>b</sup> Shanghai Institute of Traumatology and Orthopaedics, Shanghai Key Laboratory for  
Prevention and Treatment of Bone and Joint Diseases, Ruijin Hospital, Shanghai Jiao  
Tong University School of Medicine, 197 Ruijin 2nd Road, Shanghai 200025, P. R.  
China

<sup>1</sup> These authors contributed equally.

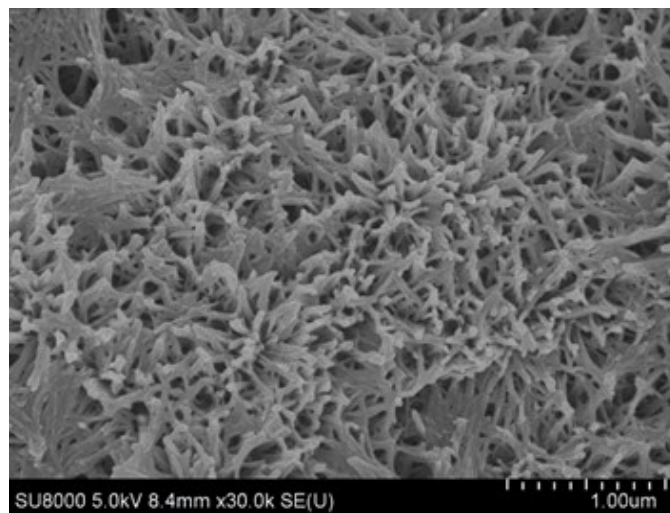
#### \*Corresponding Author

Yingbo Wang: E-mail: ybwang20002575@163.com; Tel&Fax: +86 09914333279;

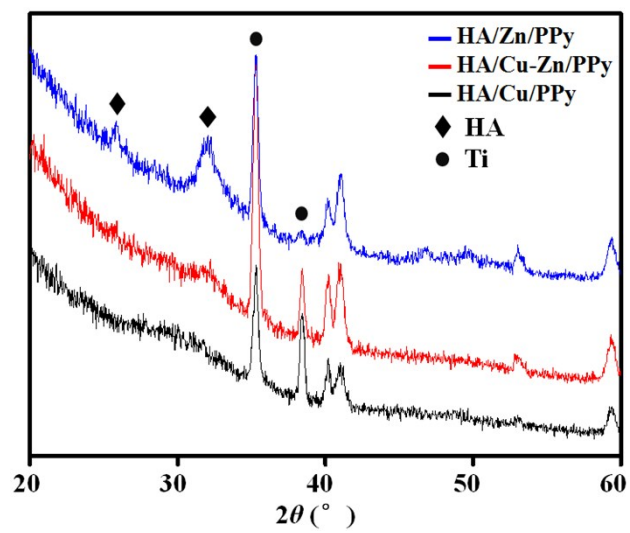
Wenguo Cui: E-mail: wgcui80@hotmail.com; Tel&Fax: (+86) 21-  
64370045\*663332;



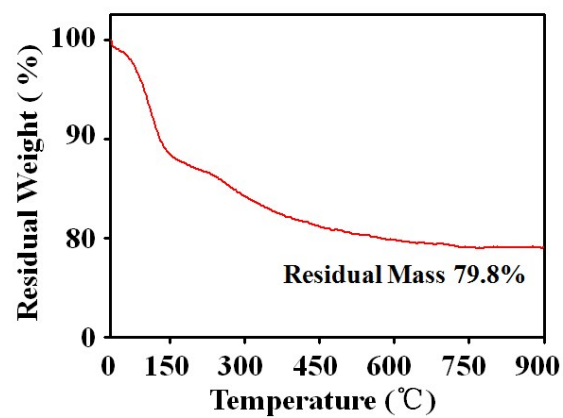
**Fig. S1.** The SEM of HA/Cu composite coating.



**Fig. S2.** The SEM of pure PPy coating



**Fig. S3.** The XRD of composite coatings.



**Fig. S4.** The TG of composite coating.