Supplementary information for Fabrication of Silver Octahedral Nanoparticle-containing Polycaprolactone Nanocomposite for Antibacterial Bone Scaffolds

Yu Gao a,d, Ammar Mansoor Hassanbhai b,d, Jing Lim b,d, Lianhui Wang a*, Chenjie Xu b,c*

a Key Laboratory for Organic Electronics and Information Displays & Institute of Advanced Materials (IAM), Jiangsu National Synergistic Innovation Center for Advanced Materials (SICAM), Nanjing University of Posts & Telecommunications, 9 Wenyuan Road, Nanjing 210023, China

b School of Chemical and Biomedical Engineering, Nanyang Technological University, 70 Nanyang Drive, Singapore 637457

c NTU-Northwestern Institute for Nanomedicine, Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798

d These author contributed equally to this work

*Corresponding to iamlhwang@njupt.edu.cn or cjxu@ntu.edu.sg
**Figure S1.** Image showing the pure PCL film (left) with white color and Ag-PCL film with even light brown color.

**Figure S2.** Image showing the antibacterial effect of Ag-PCL film scaffold placed on the surface of the inoculated Mueller-Hinton Agar plate, cultured with *pseudomonas aeruginosa* for 4 hours.
Figure S3. Release profile of silver ions from Ag-PCL composite film in distilled water for 21 days.

Figure S4. SEM images of plane PCL (left) and Ag-PCL (right) film.

Figure S5. SEM images of PCL film before incubation with medium (left) and after incubation with medium for 7 days (right).