

Supporting file

Facile synthesis of water soluble silver ferrite (AgFeO_2) nanoparticles and biological application as antibacterial agents

Hani Nasser Abdelhamid^{1,2}, **Abuo Talib**,⁵ **Hui-Fen Wu**^{1,3,4,5*}

¹Department of Chemistry, National Sun Yat-Sen University, Kaohsiung, 804, Taiwan

²Department of Chemistry, Assuit University, Assuit, 71515, Egypt

³School of Pharmacy, College of Pharmacy, Kaohsiung Medical University, Kaohsiung, 800, Taiwan

⁴Center for Nanoscience and Nanotechnology, National Sun Yat-Sen University, Kaohsiung, 804, Taiwan

⁵Doctoral Degree Program in Marine Biotechnology, National Sun Yat-Sen University, Kaohsiung, 804, Taiwan

*Corresponding author. Tel: 886-7-5252000-3955. Fax: 886-7-525-3908.

E-mail: hwu@faculty.nsysu.edu.tw (Prof. Hui-Fen Wu)

Figure Captions

Fig.S1. Size distribution of AgFeO₂ NPs.

Fig.S2. EDX analysis of AgFeO₂@PEG NPs

Fig.S3. MALDI-MS profile of *S. aureus* upon addition of (A) AgFeO₂ and (B) AgFeO₂@PEG upon different amount (a) 0, (b) 25, (c) 50, (d) 75 and (e) 100 µg/mL.

Fig.S1

a

A

b

c

d

e

a

B

b

c

d

e

Abundance