

Supporting Information

Enhanced Synergistic Antibacterial Activity through a Smart Platform Based on UiO-66 Combined with Photodynamic Therapy and Chemotherapy

Huihui Lv, Yunting Zhang, Pan Chen, Jinping Xue, Xiao Jia, Juanjuan Chen**

National & Local Joint Biomedical Engineering Research Center on Photodynamic Technologies, College of Chemistry, Fuzhou University, 2 Garden Road, Fuzhou 350116, Fujian Province, P. R. China.

*Email: chenjuanjuan@fzu.edu.cn

*Email: jiaxiao@fzu.edu.cn

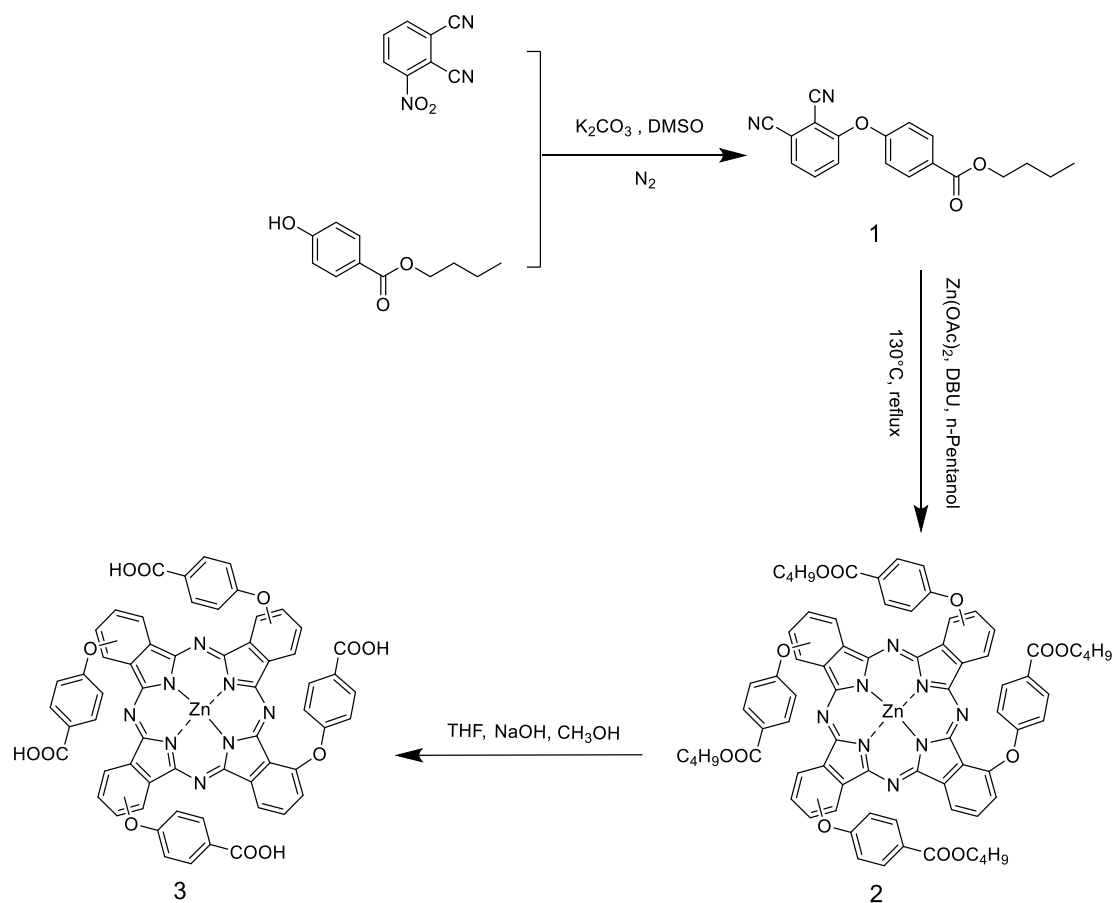
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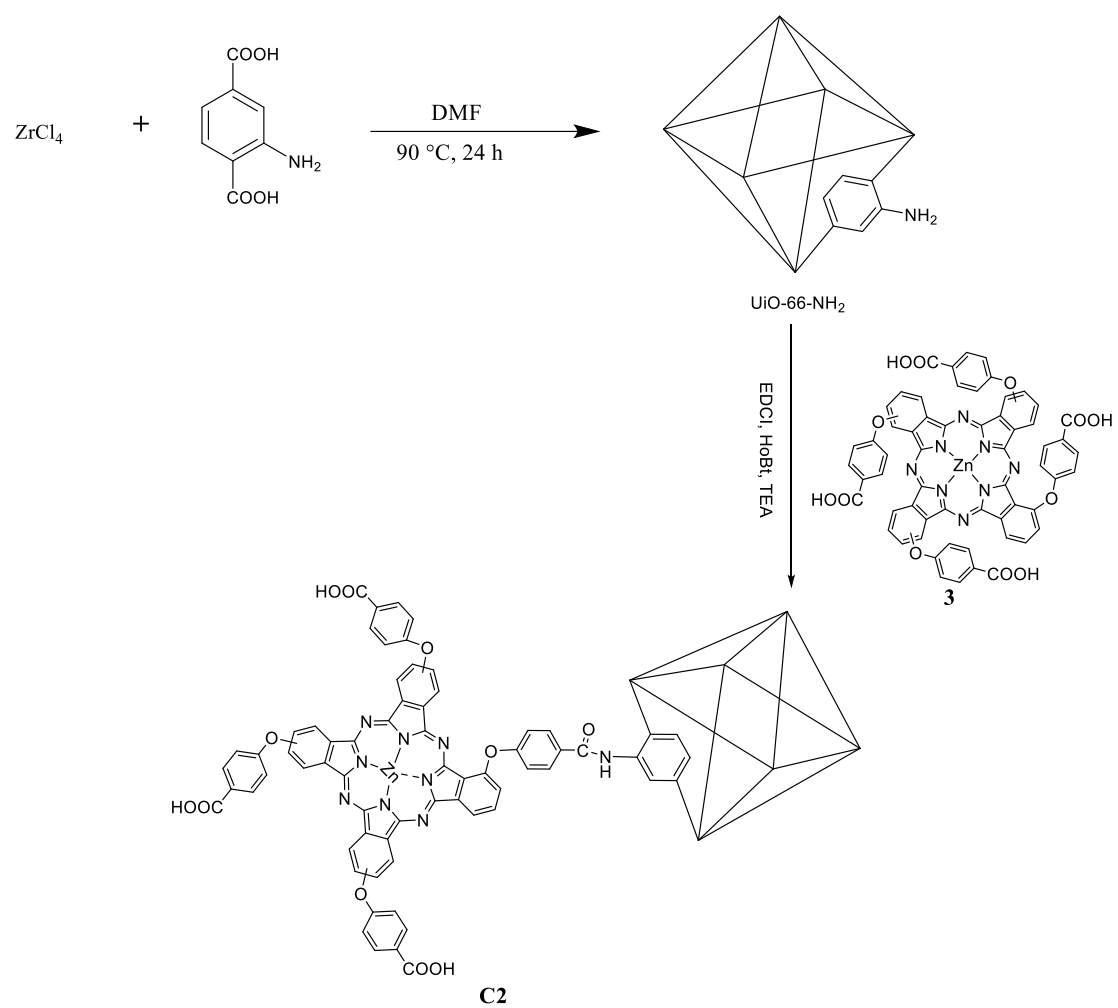
Number of Figures: 6

Number of Tables: 2

Number of Formulas: 2



Scheme S1. The synthetic procedure of **3**.



Scheme S2. The synthetic procedure of **C2**.



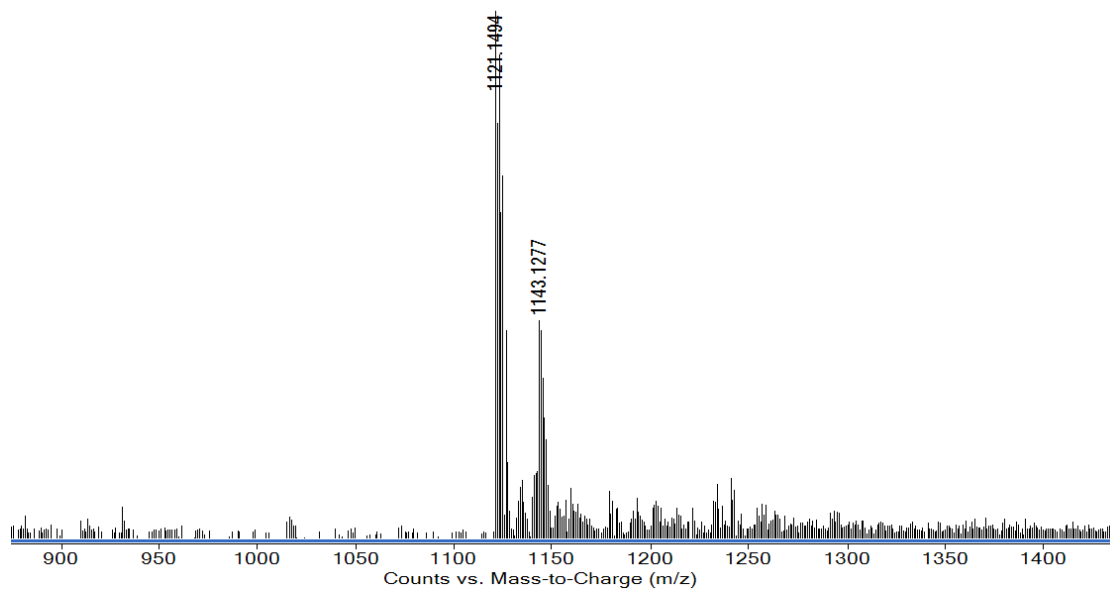


Figure S3. HRMS spectrum of **3** ($M/z[M+H^+]$).

Table S1. ICP-OES data of the Zn^{2+} concentration in **C4** (4 mg **C4** dissolved in 10 mL acid).

| Run | Zn 213.856 {458} (Radial) | Zn 206.200 {464} (Radial) |
|-------------------------|---------------------------------|---------------------------------|
| Concentration per Run 1 | 0.412 ppm | 0.414 ppm |
| Concentration per Run 2 | 0.417 ppm | 0.417 ppm |
| Concentration per Run 3 | 0.413 ppm | 0.414 ppm |
| Concentration average | 0.414 ppm | 0.415 ppm |
| Concentration RSD | 0.6 % | 0.4 % |

$$\text{Encapsulating efficiency (\%)} = \frac{\text{the mass of linezolid in C3}}{\text{total mass of linezolid}} \times 100\% = 47.6\%$$

(1)

$$\text{Drug loading rate (\%)} = \frac{\text{the mass of linezolid in C3}}{\text{total mass of C3}} \times 100\% = 50.8\%$$

(2)

Table S2. Singlet oxygen quantum yield of **ZnPc**, **3**, **C2** and **C3**.

| Compound | Φ_{Δ} |
|-----------|-----------------|
| ZnPc | 0.56 |
| 3 | 0.50 |
| C2 | 0.52 |
| C3 | 0.51 |

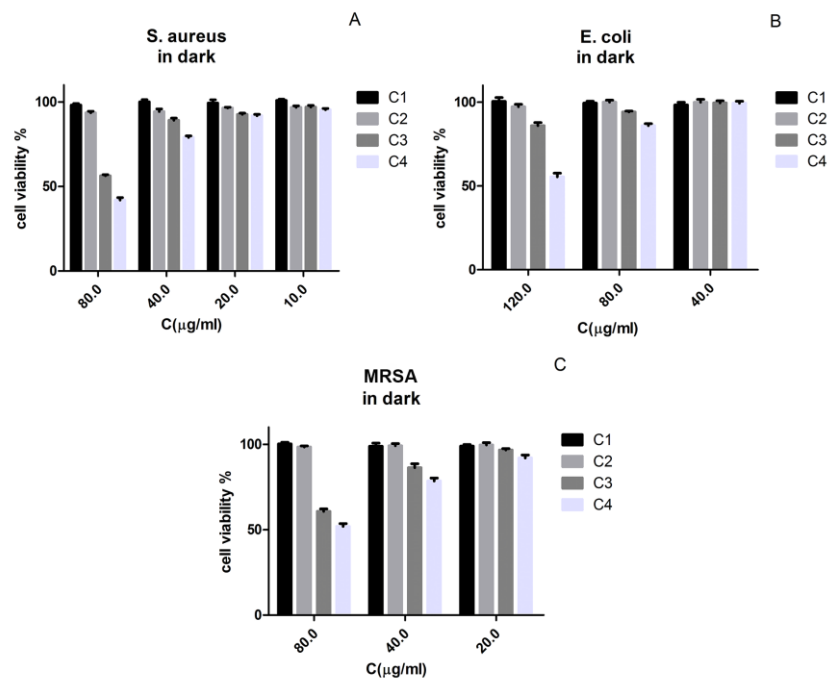


Figure S4. The antibacterial effect of C1, C2, C3 and C4 against *S. aureus*, *E. coli* and MRSA in dark at different concentrations

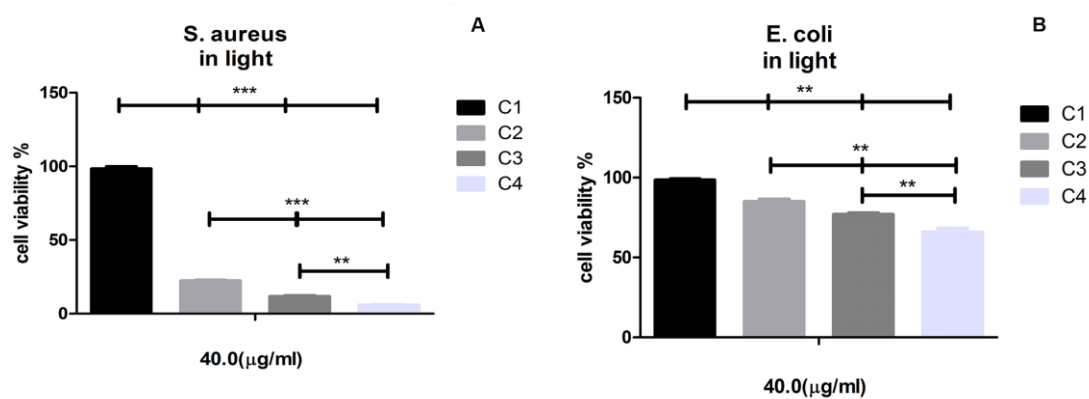


Figure S5. The antibacterial effects of **C1**, **C2**, **C3** and **C4** against *S. aureus* and *E. coli* under light illumination at 40 µg/mL (**P < 0.01, ***P < 0.005).

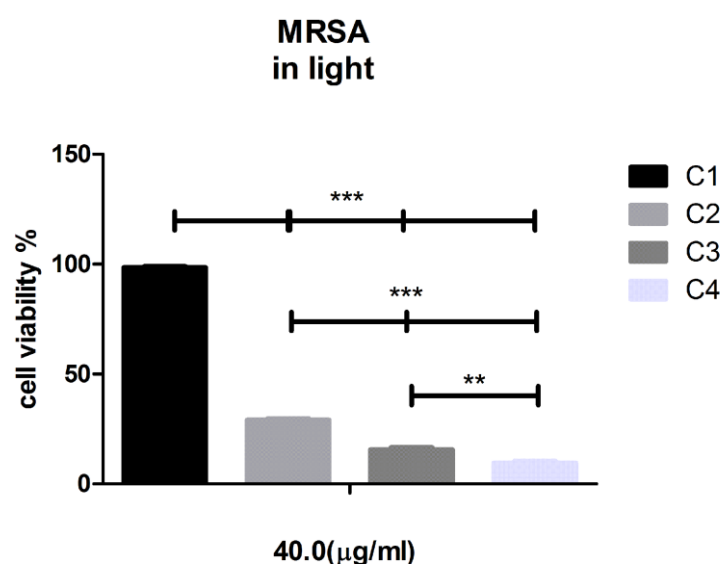


Figure S6. The antibacterial effects of **C1**, **C2**, **C3** and **C4** against MRSA under light illumination at 40 µg/mL (**P < 0.01, ***P < 0.005).