## Gallium-based metal-organic framework loaded with antimicrobial

## peptides for synergistic killing of drug-resistant bacteria

Shuo Liu, <sup>a,b,c</sup> Yuxin Ji, <sup>a</sup> Hangqi Zhu, <sup>a</sup> Zhishang Shi, <sup>a</sup> Mingchun Li <sup>a</sup> and Qilin Yu\*a,c <sup>a</sup> Key Laboratory of Molecular Microbiology and Technology, Ministry of Education, Department of Microbiology, College of Life Sciences, Nankai University, Tianjin 300071, China

<sup>b</sup> College of Environmental Science and Engineering, Tianjin Key Laboratory of Environmental Remediation and Pollution Control, Nankai University, Tianjin 300350, China

<sup>c</sup> Research Center for Infectious Diseases, Nankai University, Tianjin 300350, China

\* Corresponding author. E-mail: yuqilin@mail.nankai.edu.cn

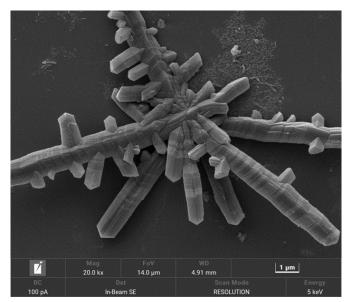


Fig. S1 An SEM image of M0.

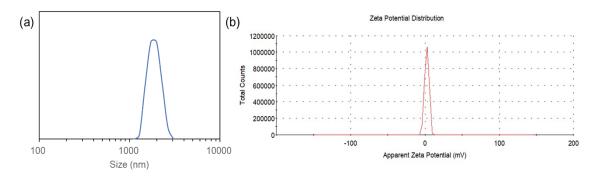


Fig. S2 DLS (a) and zeta potential (b) of M0.

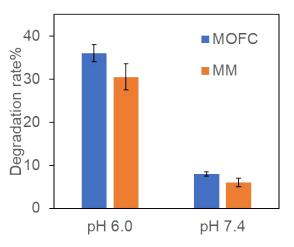


Fig. S3 Degradation rate of MOFC at different pH.



Fig. S4 Photographs of bacterial colonies growing on the plates after different treatments.

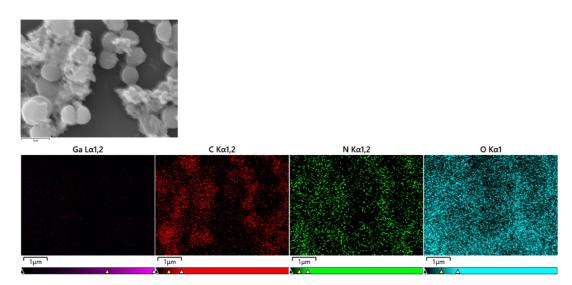


Fig. S5 EDS mapping of MRSA cells treated by Ga ion plus MEL.

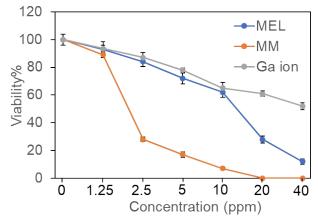
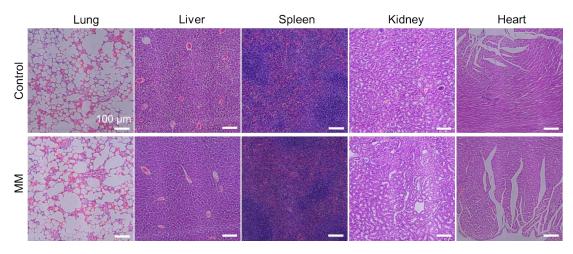


Fig. S6 Antibacterial curves of Ga ion, MEL and MM.



**Fig. S7** Representative H&E staining imaging of the main mouse organs, including lung, liver, spleen, kidney, heart in control and MM treated group.