Supplementary material

A Novel Light-Harvesting ZIF-9-TCPP as a Promising FRET-based Radiometric Fluorescence Probe for Sperm Mobility

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Supporting Figures

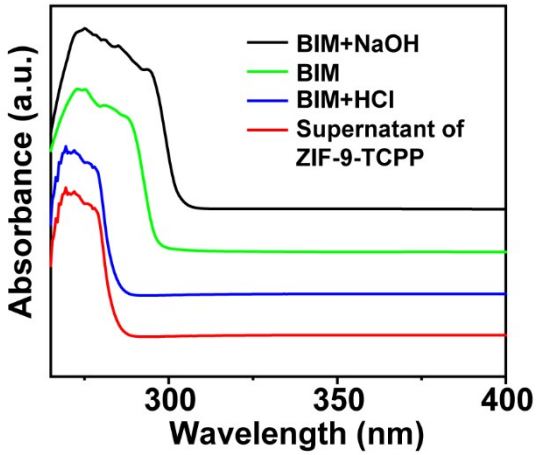

Figure S1. UV–vis spectra of supernatant of ZIF-9-TCPP and BIM at different pH.

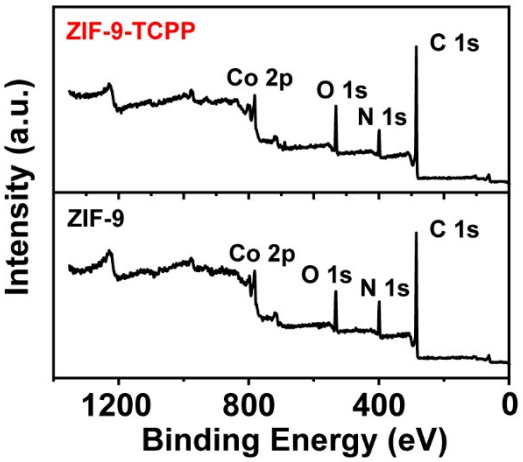

Figure S2. Full XPS spectra of ZIF-9 and ZIF-9-TCPP.

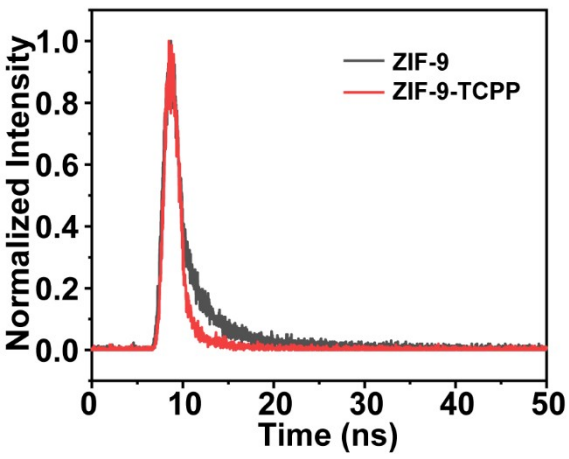

Figure S3. Fluorescence decay profiles of ZIF-9 and ZIF-9-TCPP.

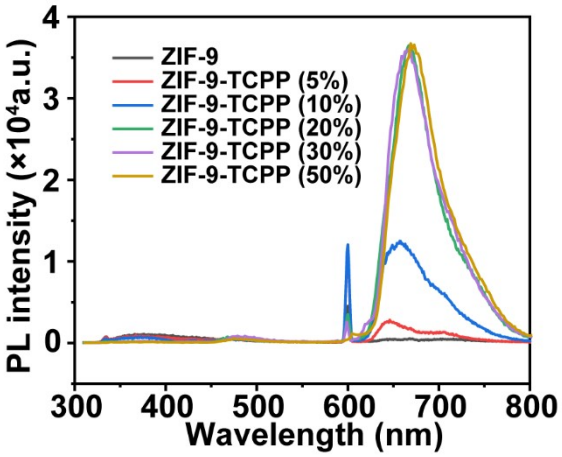

Figure S4. Fluorescence spectra of ZIF-9 and ZIF-9-TCPP with different concentration of TCPP.

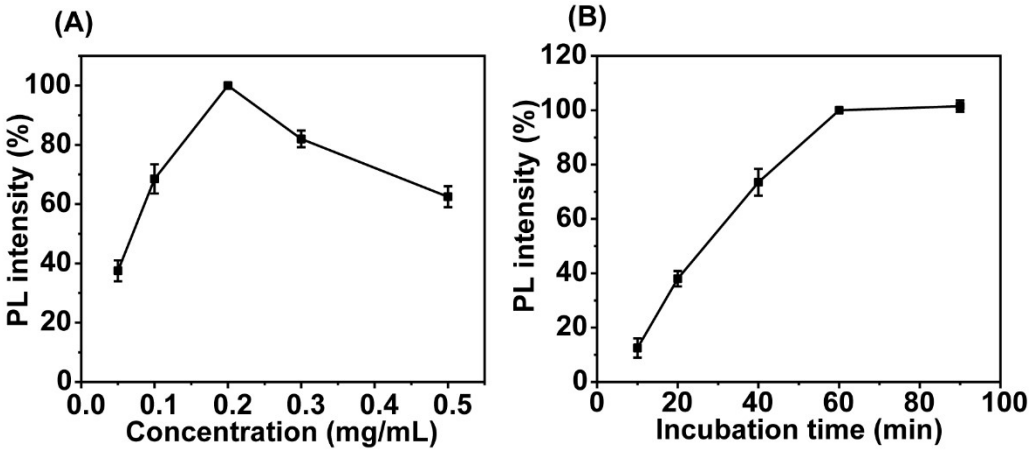

Figure S5. (A) PL intensity of different concentration of ZIF-9-TCPP. **(B)** PL intensity at 610 nm under different incubation time during Zn^{2+} detection.

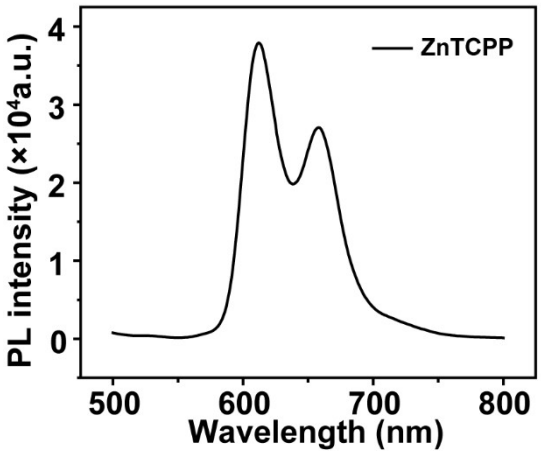

Figure S6. Fluorescence spectra of ZnTCPP.

Table S1. Comparisons of our methods with previous fluorescence probes for Zn^{2+}.

Materials	LOD	Linear range	Reference
FHCS	53.7 nM	1-10 μM	1
dicyanoisophorone derivative	15.3 nM	0-25 μM	2
Tb/Eu(btec)-4	4.2 nM	10 nM-1 mM	3
PDACQDs-SA	90 nM	0-100 μM	4
H_1	36 nM	0-10 μM	5
ZIF-9-TCPP	**0.7 nM**	5 nM-2 μM	**This work**

References

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