

Supporting Information for

A Near-Infrared Dual-Emission Ratiometric Fluorescence Imaging Nanoprobe for Real-Time Tracing the Generation of Endogenous Peroxynitrite in Single Living Cell and in Vivo

Pengxiang Lin, Dongxia Chen, Liangliang Zhang,* Jiayao Xu, Yong Huang, and Shulin Zhao*

State Key Laboratory for the Chemistry and Molecular Engineering of Medicinal Resources, Guangxi Normal University, Guilin, 541004, China.

Table of contents

Figure S1	-----S2
Figure S2	-----S3
Figure S3	-----S3
Figure S4	-----S4
Figure S5	-----S4
Figure S6	-----S5
Figure S7	-----S5
Figure S8	-----S6
Figure S9	-----S7

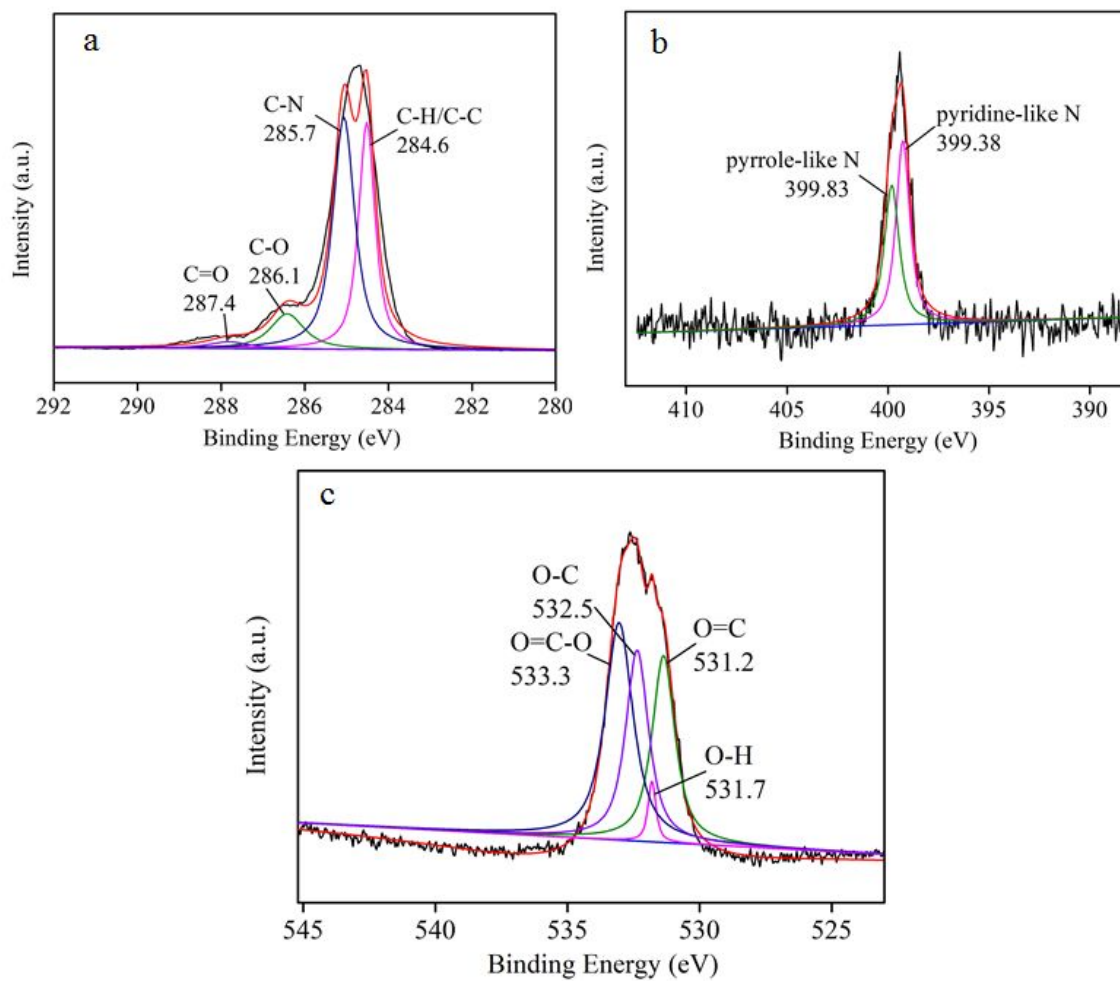


Figure S1. High-resolution XPS spectra of NI-BQDs for C1s (a), N1s (b) and O1s (c).

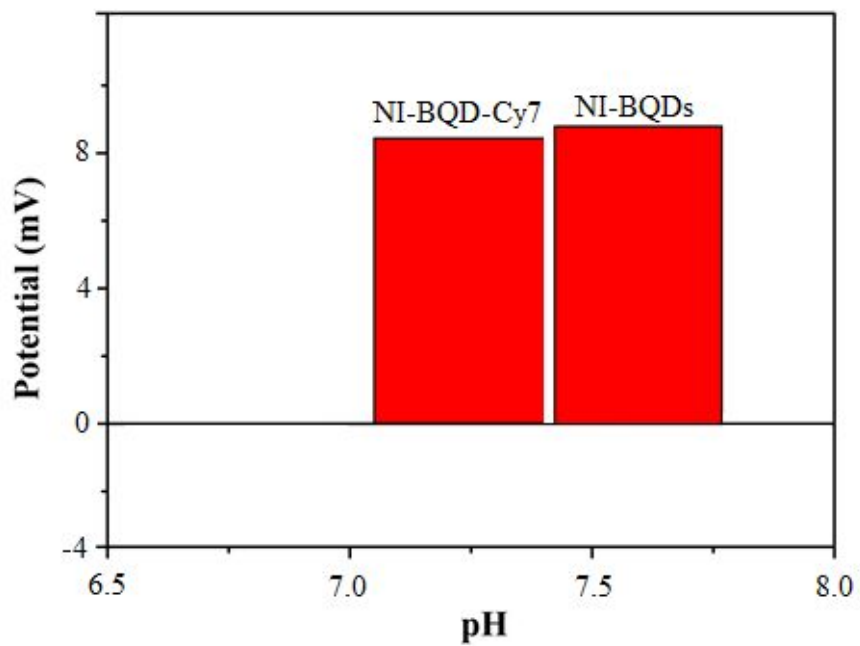


Figure S2. Zeta-potential of the as-prepared NI-BQDs and NI-BQD-Cy7.

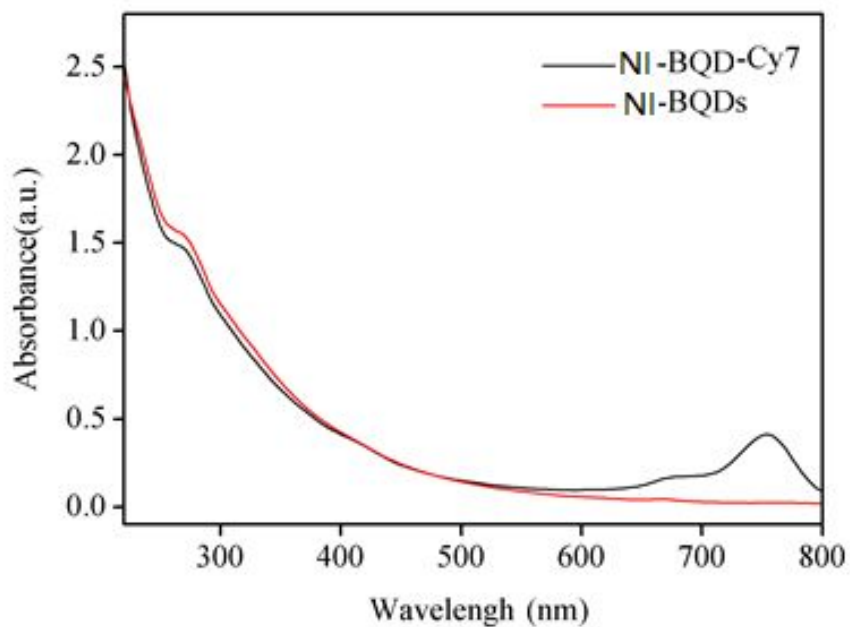


Figure S3. The UV-Vis spectra of NI-BQDs and NI-BQD-Cy7.

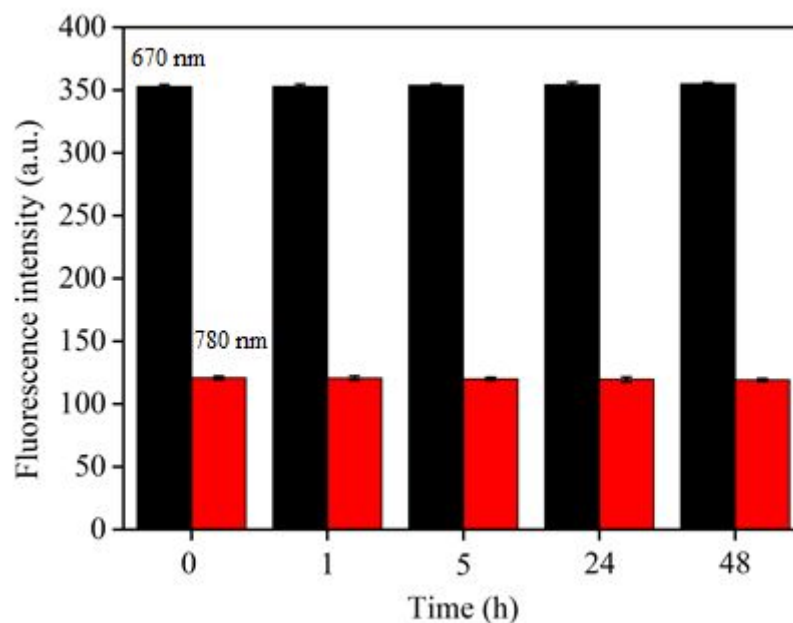


Figure S4. Stability of NI-BQD-Cy7 fluorescent nanoprobe in aqueous solution.

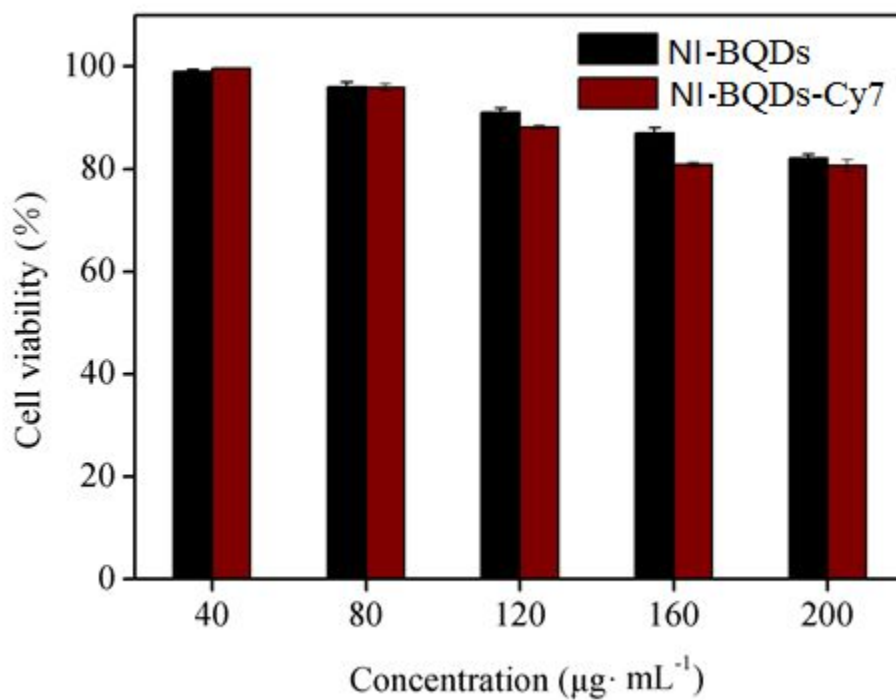


Figure S5. Cytotoxicity of the NI-BQDs and NI-BQD-Cy7 nanoprobe.

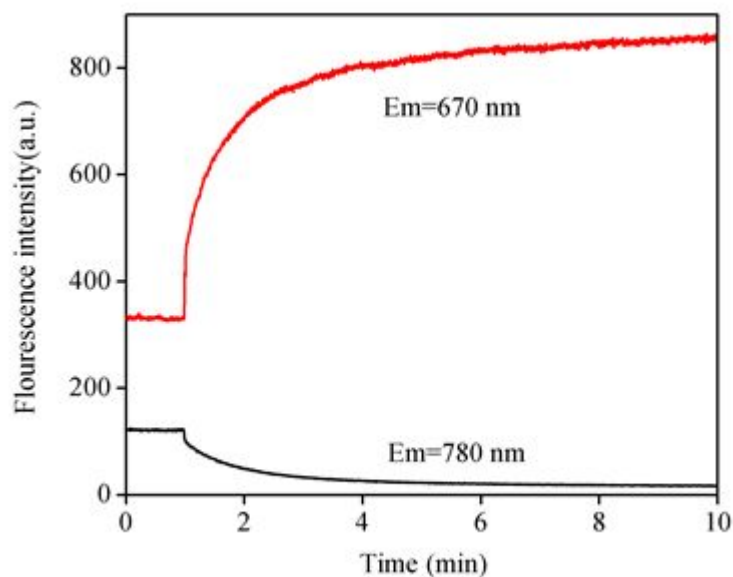


Figure S6. Kinetics curve for the change of fluorescence intensity of NI-BQD-Cy7 after the addition of ONOO⁻.

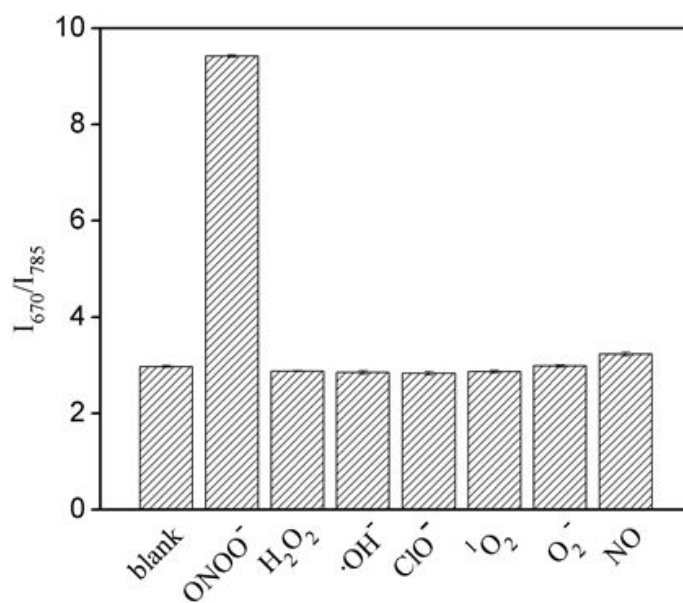


Figure S7. Selectivity of the NI-BQD-Cy7 nanoprobes in the presence of other bioactive RNS and ROS molecules.

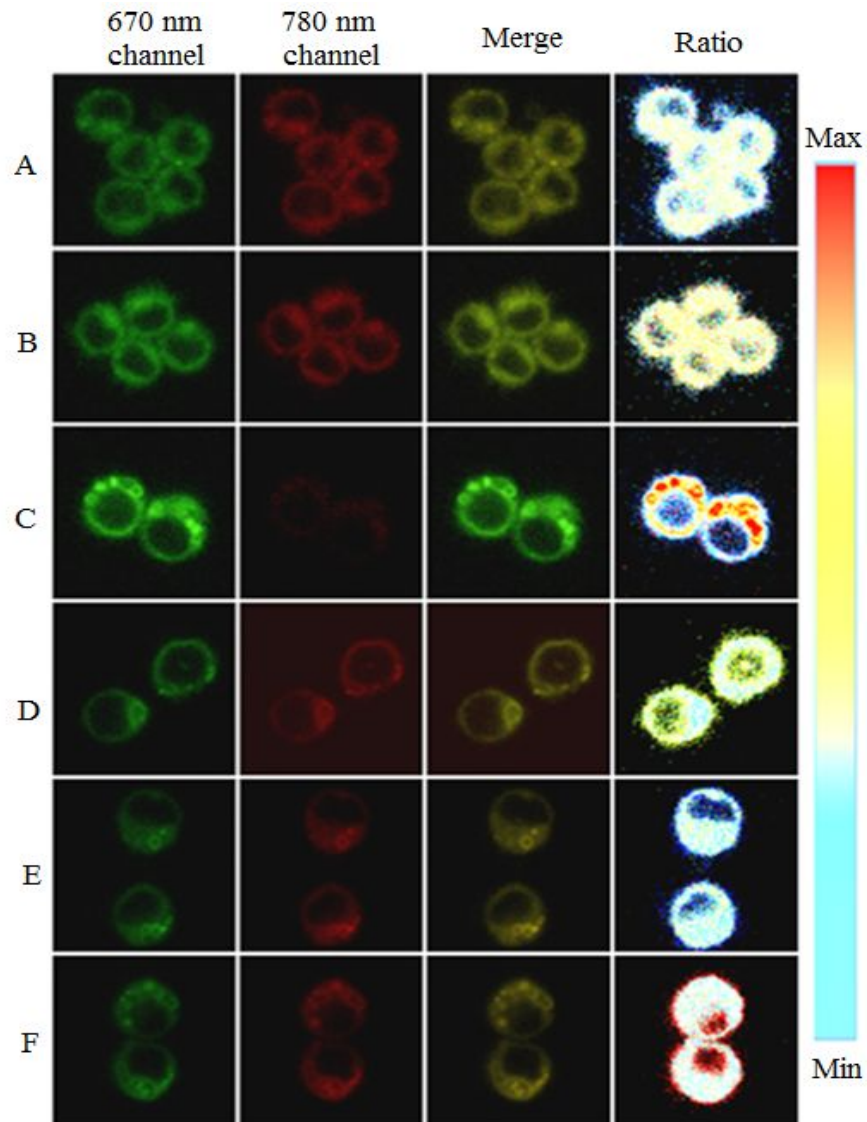


Figure S8. Dual channel ratiometric fluorescence images of exogenous ONOO^- in living cells. The RAW264.7 cells solution containing NI-BQD-Cy7 nanoprobe was incubated with PBS solution (A), $100 \mu\text{M}$ SIN-1 solution (B), 1 mM SIN-1 solution (C), a mixed solution containing 1 mM SIN-1 and $100 \mu\text{M}$ tetracycline (D), $100 \mu\text{M}$ MSB (E) and $500 \mu\text{M}$ NOC-18 solution (F).

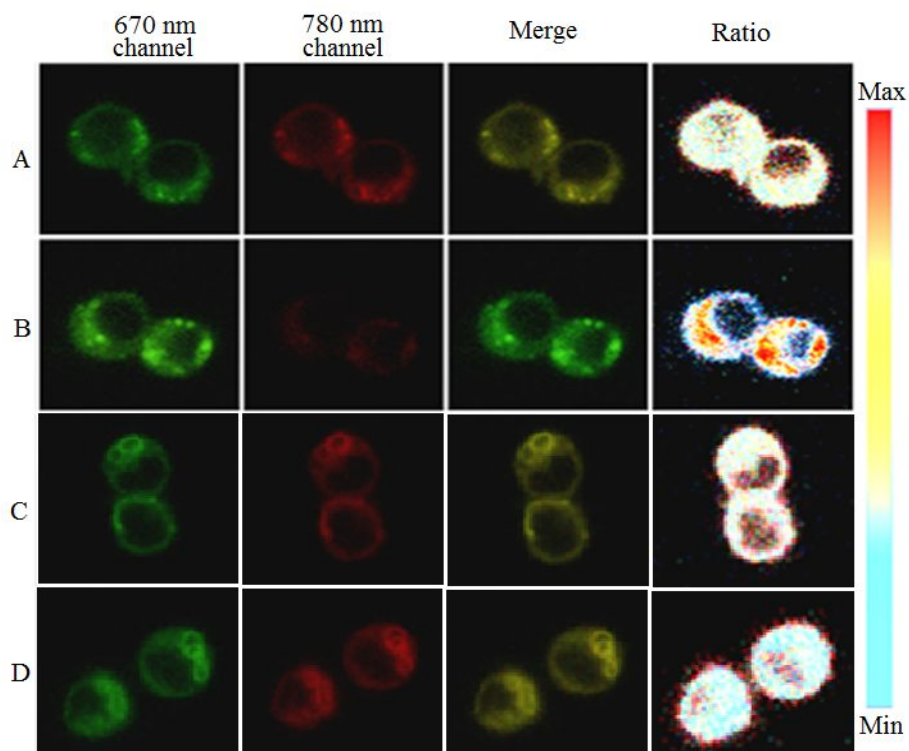


Figure S9. Dual channel ratiometric fluorescence images of endogenous ONOO^- in living cells. The RAW264.7 cells solution containing NI-BQD-Cy7 nanoprobe was incubated with PBS solution (A), a mixed solution containing 50 ng/mL $\text{INF-}\gamma$, 1 $\mu\text{g/mL}$ LPS and 25 nM PMA (B), a mixed solution containing 50 ng/mL $\text{INF-}\gamma$, 1 $\mu\text{g/mL}$ LPS, 25 nM PMA and 100 μM 1400W (C), a mixed solution containing 50 ng/mL $\text{INF-}\gamma$, 1 $\mu\text{g/mL}$ LPS, 25 nM PMA and 100 μM apocynin (D).