

Supporting Information

Sensitive detection of dissolved oxygen in seawater by fluorometric sensing based on ZnO-NH₂@SiO₂ QDs

Mengmeng Cao^a, Hang Lv^{a, b}, Song Hu^a, Guohong Zhou^{a, *}

*^a Shanghai Institute of Ceramics, Chinese Academy of Sciences,
Shanghai 200050, P.R. China.*

*^b Center of Materials Science and Optoelectronics Engineering,
University of Chinese Academy of Sciences, Beijing, 100049, China.*

*Corresponding author.

E-mail: sic_zhough@mail.sic.ac.cn (Prof. Guohong Zhou)

Tel.: +86 21 69906230

Address: 588 N. Heshuo Rd., Shanghai, China.

Table S1 Common elements and concentrations in seawater (S=35‰).

Ions	Concentrations (g/Kg)
Cl ⁻	19.354
SO ₄ ²⁻	2.712
Br ⁻	0.0673
F ⁻	0.0013
B	0.0045
Na ⁺	10.77
Mg ²⁺	1.290
HCO ₃ ⁻	0.142
Ca ²⁺	0.4121
K ⁺	0.399
Sr ²⁺	0.0079

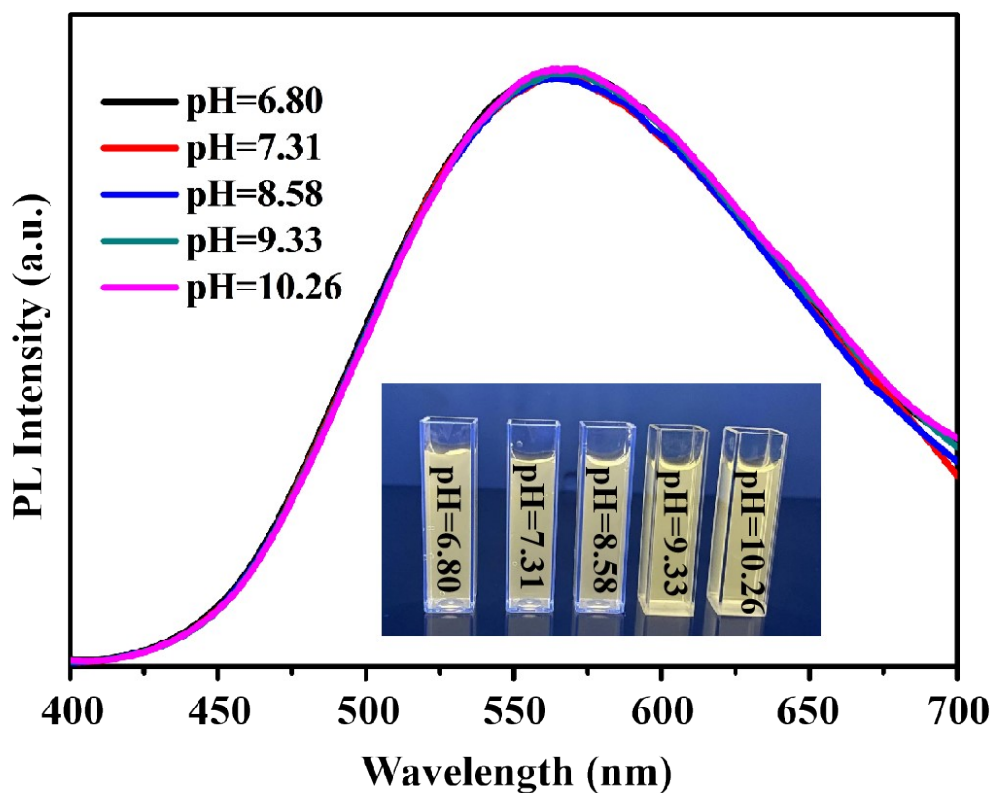


Figure S1. PL spectra and photographs (illustration) of as-prepared ZNS-1 QDs in the pH range of 6.80 to 10.26 under excitation of 365 nm.

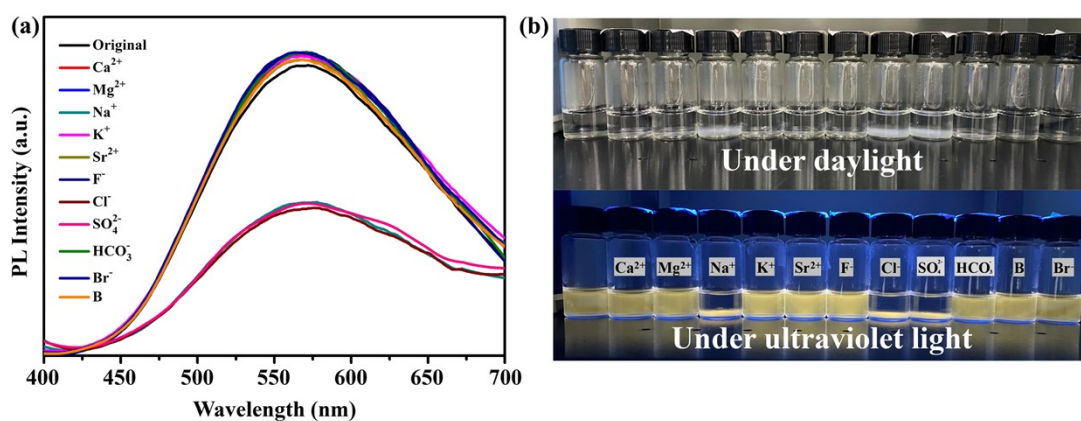


Figure S2. Photographs under daylight and ultraviolet light (a), and PL spectra (b) of as-prepared ZNS-1 QDs dispersed in the different ion solutions under excitation of 365 nm.

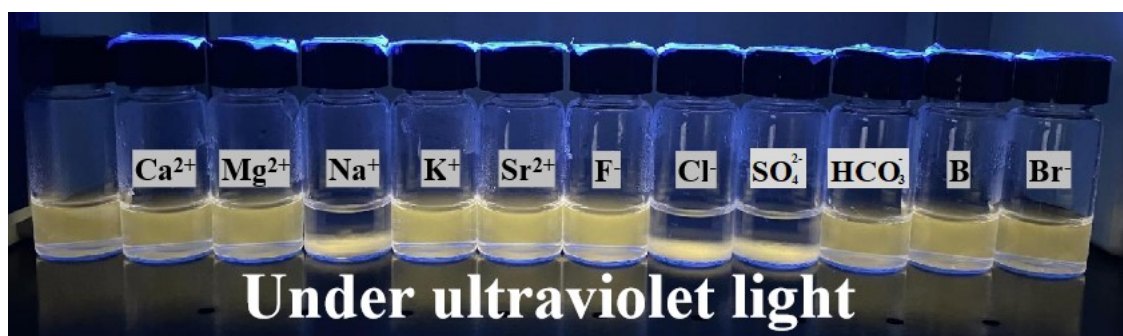


Figure S3. Photographs under ultraviolet light of as-prepared ZnO QDs dispersed in the different ion solutions.

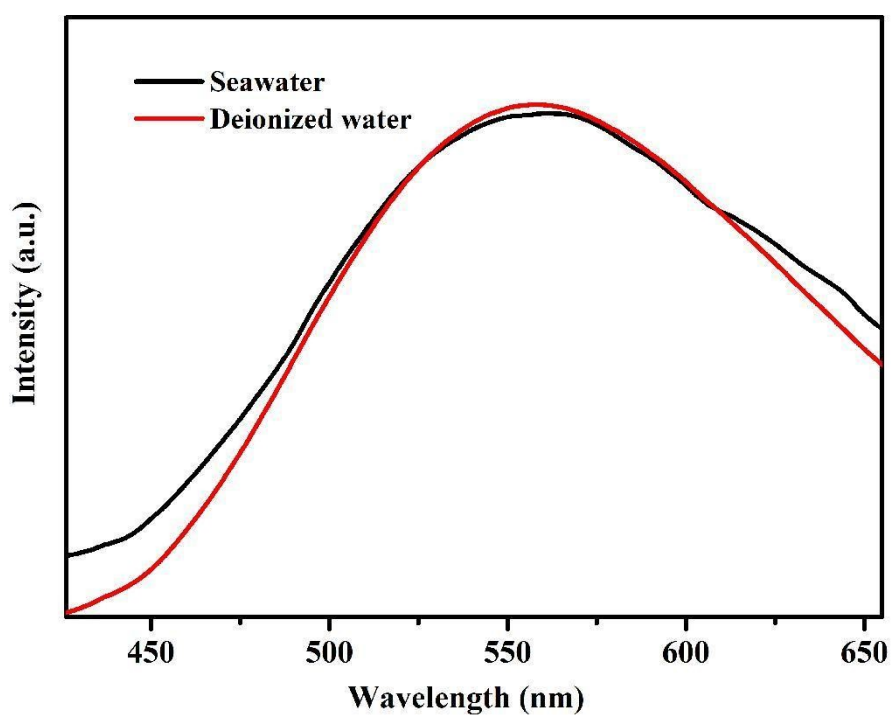


Figure S4. PL spectra of as-prepared ZNS-2 QDs respectively dispersed in 80 mL deionized water and seawater under 365 nm excitation.