

## Supporting Information

### Surface molecularly imprinted polymers on CQDs@MIL-101 for sensitive detection of quorum signaling molecules (N-acyl homoserine lactone) in activated sludge

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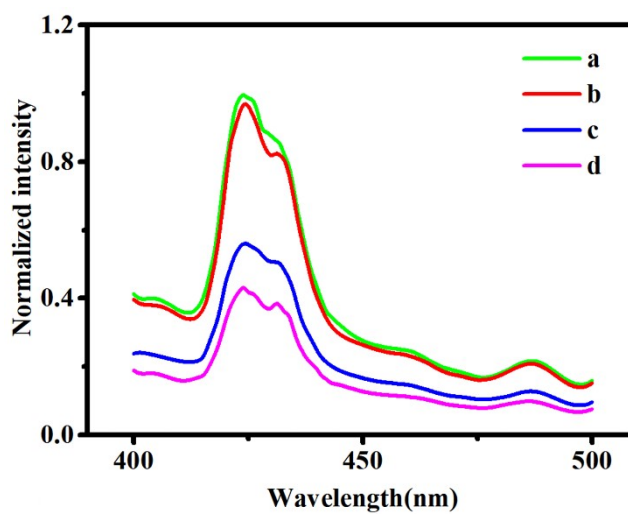
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**Fig. S1.** Fluorescence spectra of CQDs @MIL-101@NIPs (a), CQDs @MIL-101@MIPs after elution (b), recognition detection of template molecules (c) and CQDs @MIL-101@MIPs before elution (d).

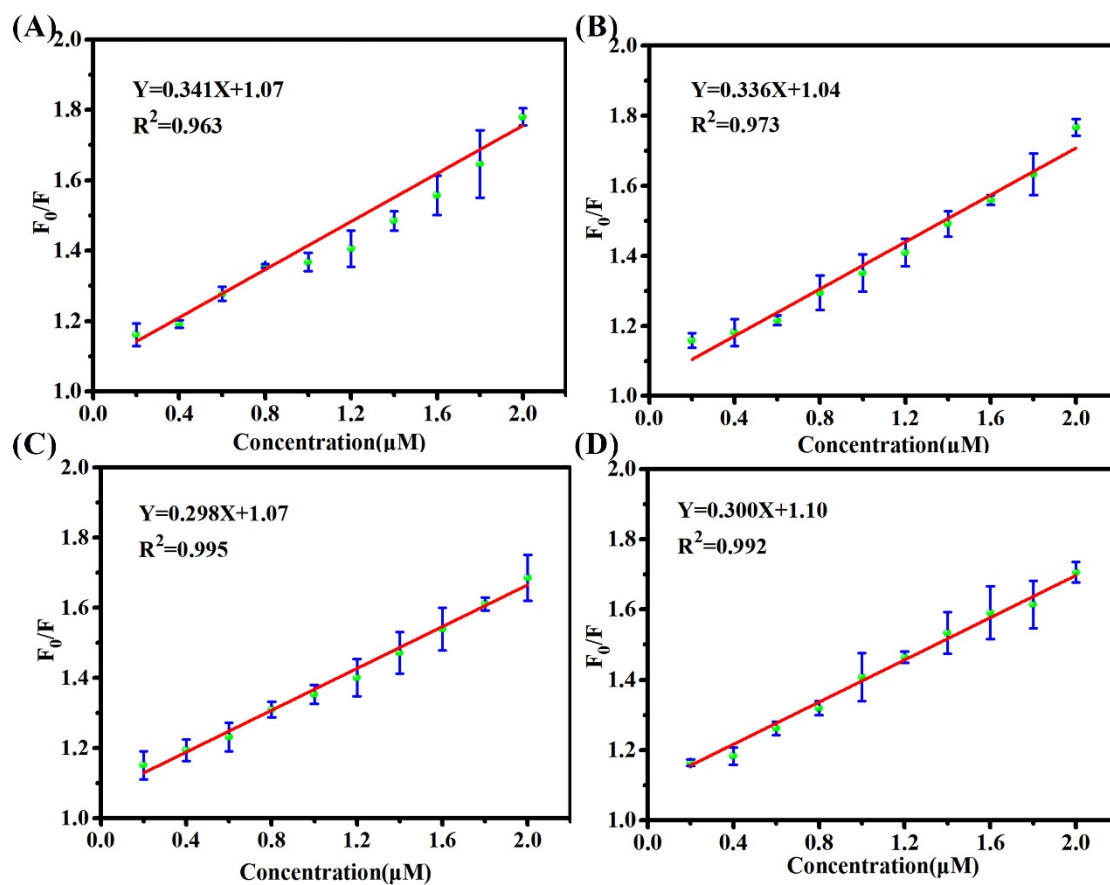
**Fig. S2.** Stern-Volmer plots for CQDs@MIL-101@MIPs with addition of different concentrations of C4-HSL (A), C6-HSL (B), C8-HSL (C), 3-oxo-C8-HSL (D).

**Fig. S3.** Stern-Volmer plots for CQDs@MIL-101@NIPs with addition of different concentrations of C4-HSL (A), C6-HSL (B), C8-HSL (C), 3-oxo-C8-HSL (D).

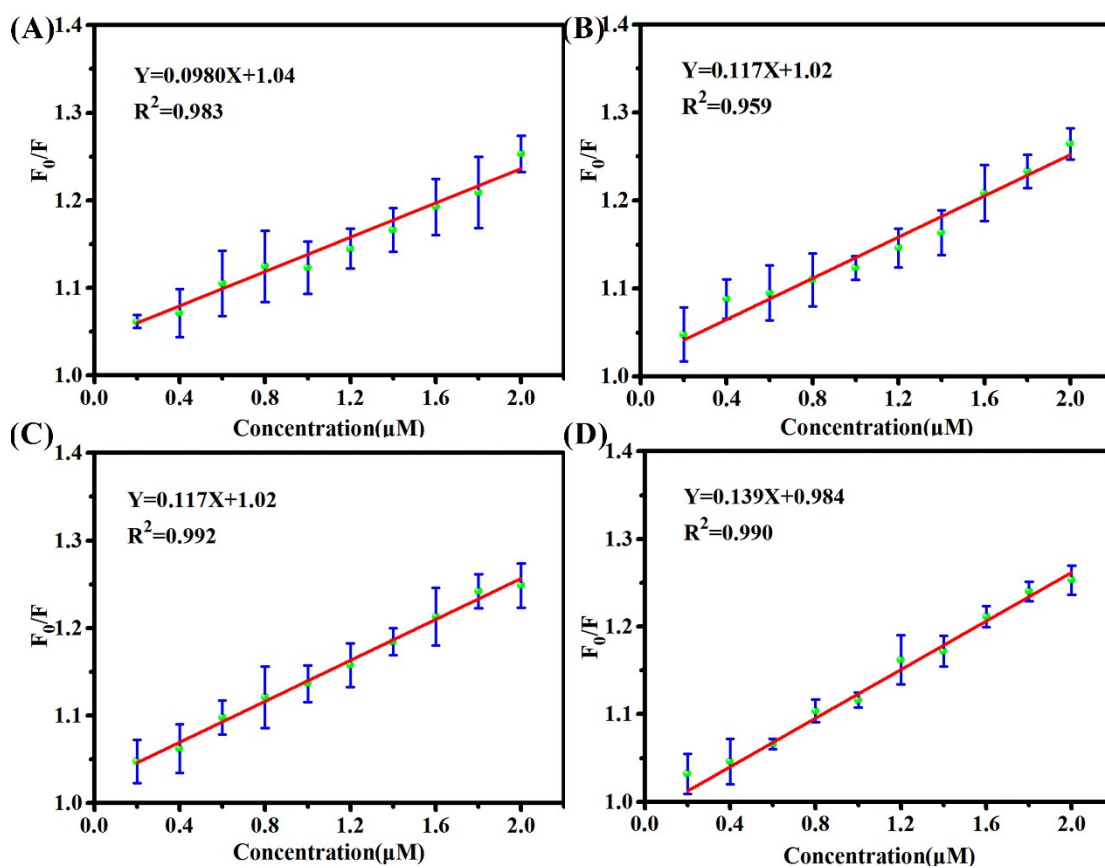
**Fig. S4.** Schematic diagram of the structural formulae of different kind of N-acyl homoserine lactone molecules and other interfering compounds.



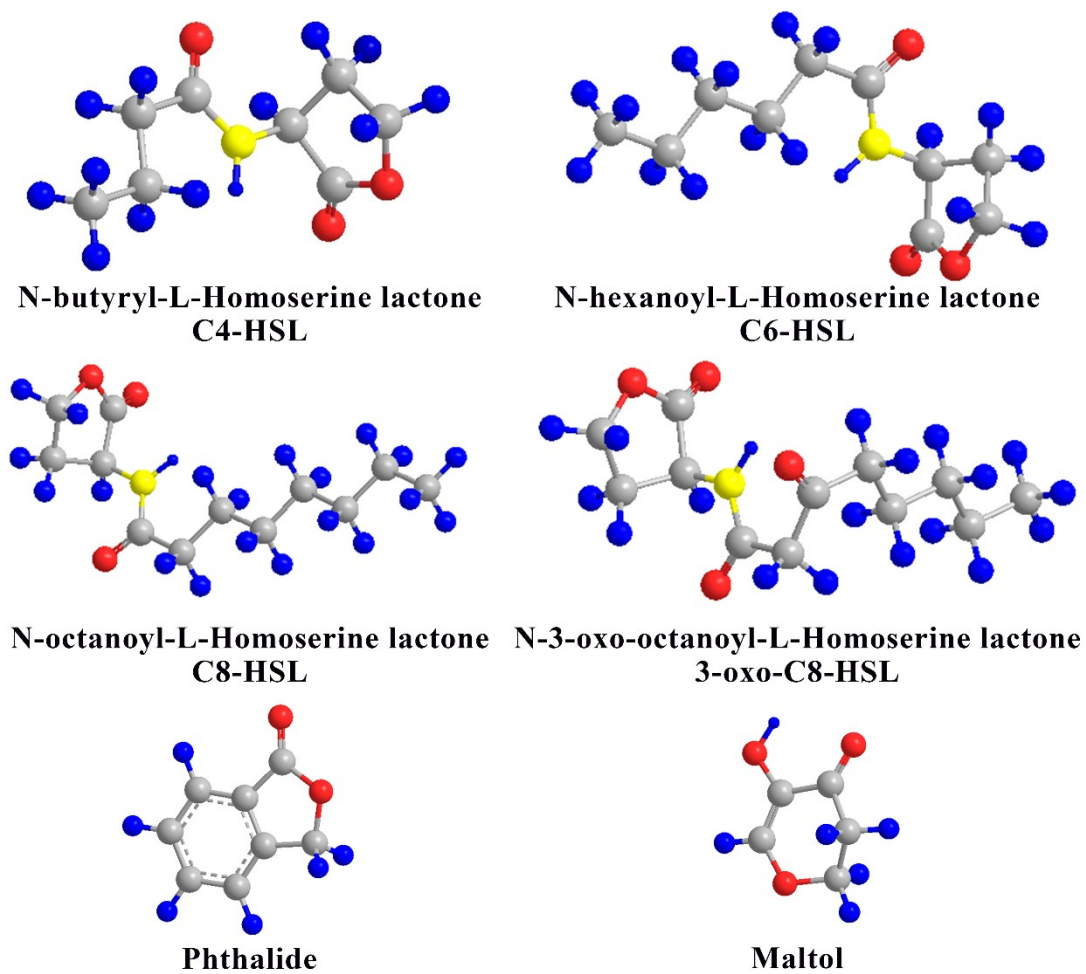
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**Fig. S4.** Schematic diagram of the structural formulae of different kind of N-acyl homoserine lactone molecules and other interfering compounds.

