

Supplementary Information

Figures

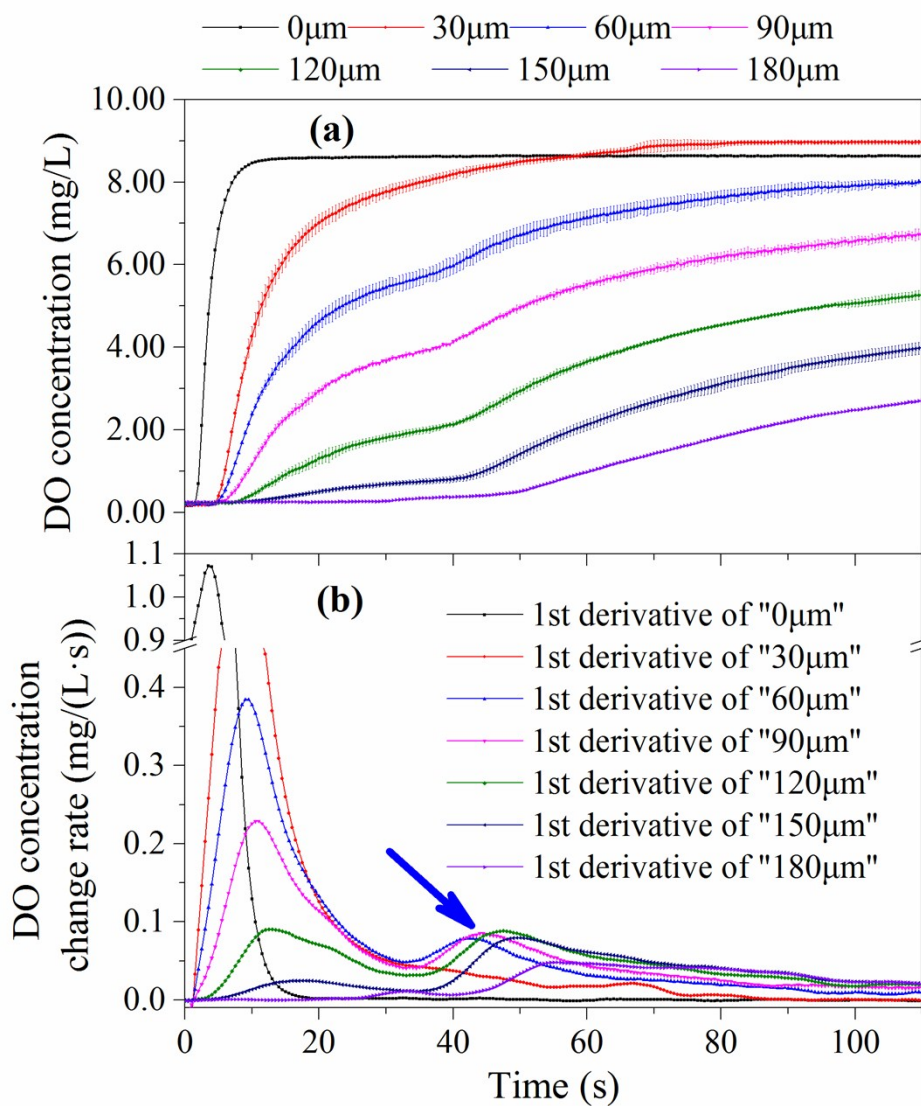


Fig. S1 (a) Oxygen-infuse processes in the active biofilm; (b) First-order derivatives of the DO concentrations in the active biofilm

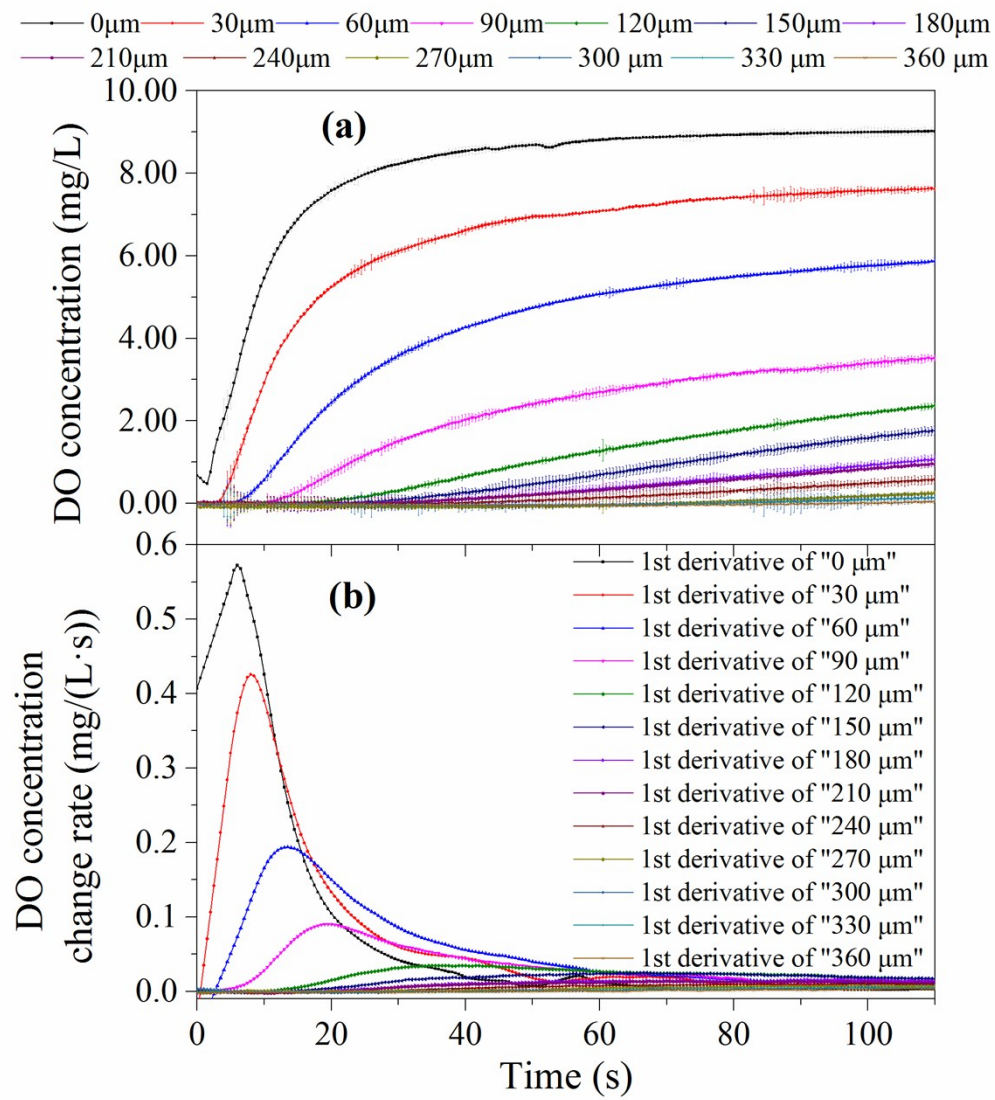


Fig. S2 (a) Oxygen-infuse processes in the inactive biofilm; (b) First-order derivatives of the DO concentrations in the inactive biofilm

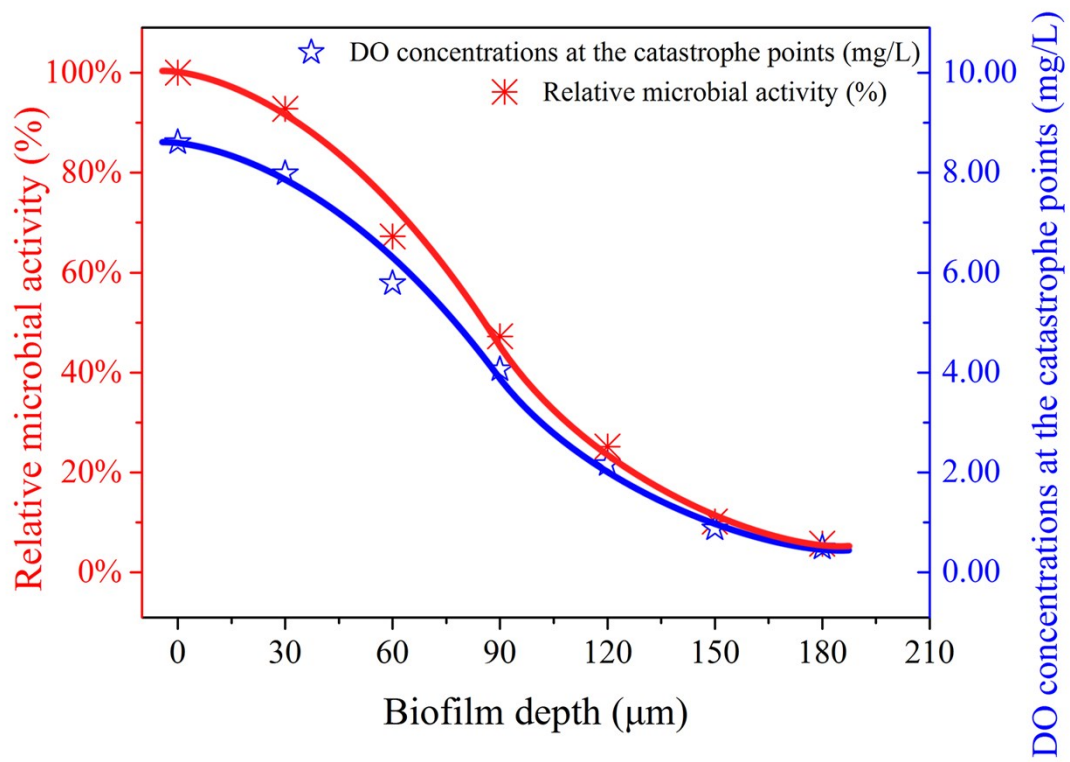


Fig. S3 DO concentrations at the catastrophe points and relative microbial oxygen metabolic activity microdistribution inside the active biofilm