

## Support materials

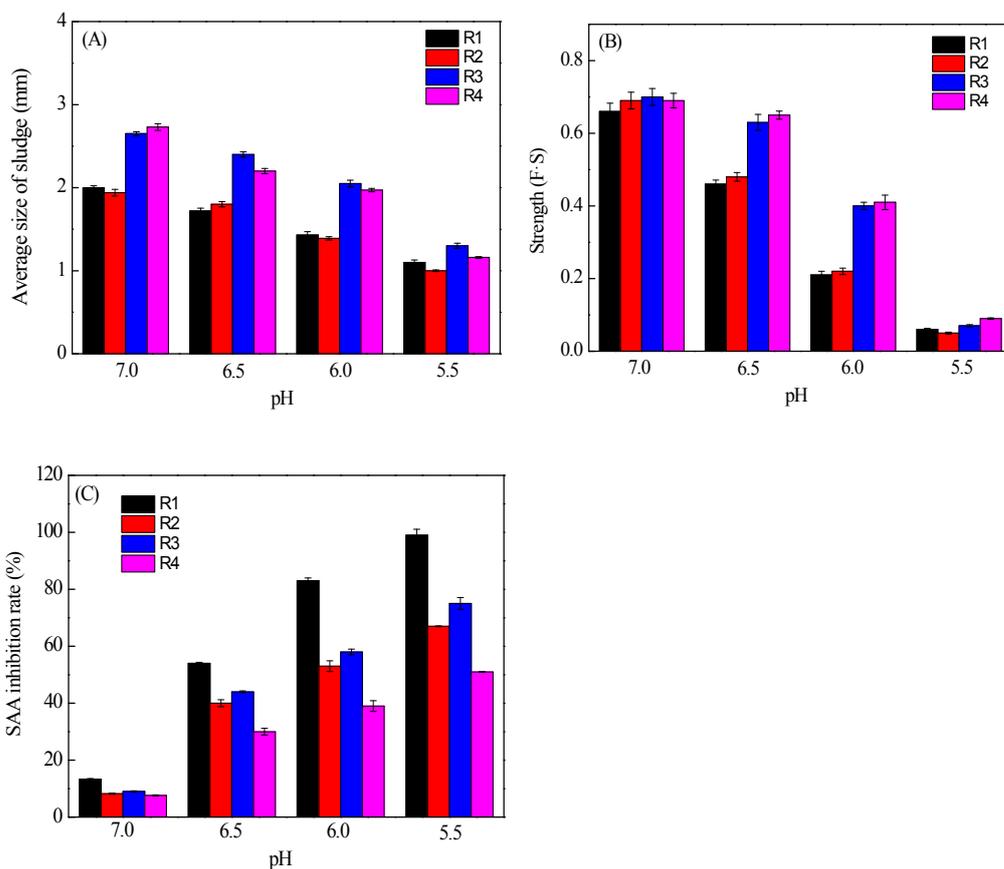


Fig. S1 (A) The average size, (B) the strength and (C) the specific ANAMMOX activity (SAA) inhibition rate of granules with low biomass density when the different types of exogenous AHLs were added under the neutral and acidic conditions. Error bars are defined as standard error of the mean ( $n = 9$ ), error  $< \pm 3\%$ . “R1”, “R2”, “R3” and “R4” represent the group without exogenous AHLs, the group with adding exogenous C6-HSL, the group with adding exogenous C8-HSL and the group with adding exogenous C6-HSL and C8-HSL, respectively.