

Fig. S1 Schematic diagram of the miniature fermenter: (1) operation interface, (2) stirrer, (3) water bath, (4) pH probe, (5) temperature probe, (6) perforated tube aeration, (7) sampling port, (8) gas flowmeter, (9) air pump, (10) Na_2CO_3 feed bottle, (11) Na_2CO_3 feed pump, (12) NH_4Cl feed bottle, (13) NH_4Cl feed pump.

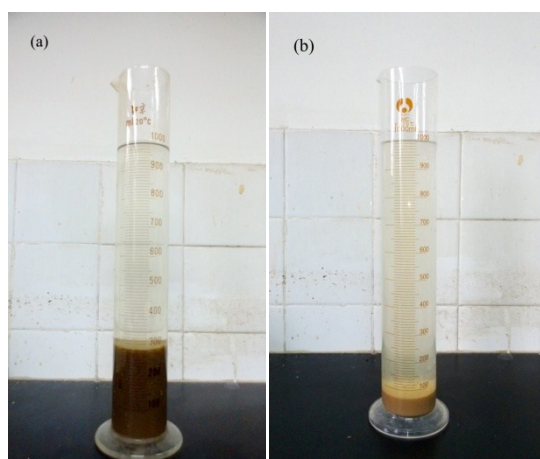


Fig. S2 The sludge properties during the period of the enrichment of nitrifying bacteria community: (a) The seed sludge; (b) The nitrifying bacteria community enriched sludge.