

## Support materials

Fig S1. Images of granules during different operation phases.

Fig S2. SEM micrographs of granules during different operation phases.

Fig S3. Effects of inhibitors on the settling velocity and strength of ANAMMOX granules under different TN concentrations. (A) the settling velocity of ANAMMOX granules; (B) the strength of ANAMMOX granules. Error bars are defined as standard error of the mean (n=9), Error <math>< \pm 3\%</math>.



Stable period (Phase I , 25d)



Stable period (Phase II , 60d)



1<sup>st</sup> inhibition period (Phase III, 90d)

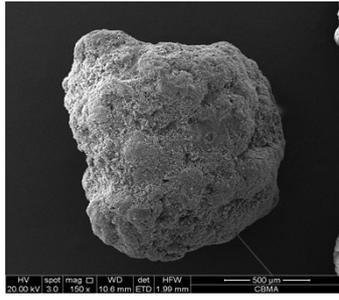


2<sup>nd</sup> inhibition period (Phase IV, 140d )



Recovered period (Phase V , 230d)

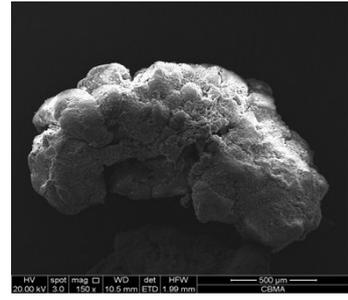
Fig S1. Images of granules during different operation phases.



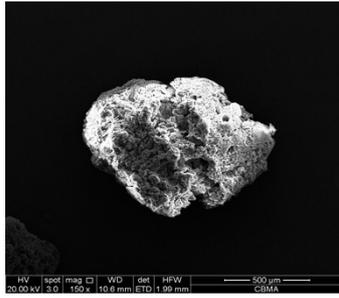
Stable period (Phase I , 25d)



Stable period (Phase II , 60d)



1<sup>st</sup> inhibition period (Phase III, 90d)



2<sup>nd</sup> inhibition period (Phase IV, 140d )



Recovered period (Phase V , 230d)

Fig S2. SEM micrographs of granules during different operation phases.

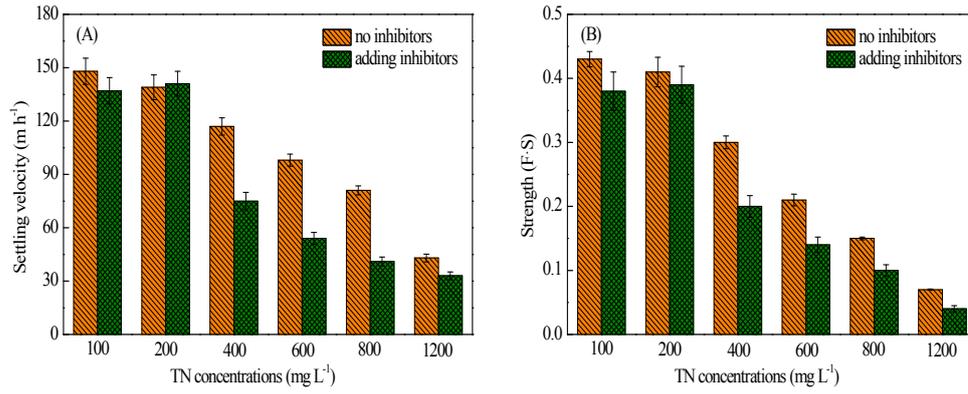


Fig S3. Effects of inhibitors on the settling velocity and strength of ANAMMOX granules under different TN concentrations. (A) the settling velocity of ANAMMOX granules; (B) the strength of ANAMMOX granules. Error bars are defined as standard error of the mean (n=9), Error < ±3%.