**Supporting Information for**

**Metagenomic insights into mixotrophic denitrification facilitated nitrogen removal in a full-scale A2/O wastewater treatment plant**

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**S1 Table.** **Design parameters of the municipal wastewater treatment plant in Yixing, Jiangsu, China (YXM WWTP).**

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| --- | --- |
|  | **Parameter** |
| **PRAN** | 4884 m3 HRT=1.02 h |
| **ANA** | 7260 m3 HRT=1.52 h |
| **AN** | 46042 m3 HRT=9.61 h |
| **AE** | 52536 m3 HRT=10.99 h |
| **POAN** | 8721 m3 HRT=1.82 h |
| **POA** | 2904 m3 HRT=0.61 h |
| **HRT** | 25.53 h |
| **SRT** | 22 days |
| **F/M** | 0.03 kg BOD5/kg MLSS·day |
| **MLSS** | 3.5 g/L |

PRAN: pre-anoxic, ANA: anaerobic, AN: anoxic, AE: aerobic, POAN: post-anoxic, POA: post-aerobic, HRT: hydraulic retention time, SRT: solids retention time, F/M: food-to-microorganisms ratio, MLSS: mixed liquor suspended solids