



Figure S1. Microalgal photosynthetic activities under different NH_3 concentrations in previous and present studies. ^a: Oxygen generation rate (Belkin & Boussiva 1991), ^b: Specific growth rate (Dai et al. 2008), ^c: ^{14}C uptake rate (Azov & Goldman 1982), ^d: Specific growth rate (Tan et al 2016). Obtained 50% effective NH_3 concentration (EC_{50}) by fitting the sigmoid regression with correlation coefficient $R > 0.94$ were *Arthrospira platensis* LB1475/a: 2.6 mM, *Anabaena* sp.: 0.80 mM, *Microcystis aeruginosa* FACHB 315: 0.39 mM, *Phaeodactylum tricornerutum* TFX-1: 1.3 mM, *Dunaliella tertiolecta* Dun: 1.3 mM, *Scenedesmus obliquus* Turpin: 1.2 mM, *Chlorella pyrenoidosa* FACHB 9: 2.5 mM, and *Chlorella sorokiniana* NIES 2173: 1.6 mM. All obtained EC_{50} are statistically significant at $p < 0.01$.