



**Figure 2. Determination of oxygen uptake rates during the first minutes of illumination of anaerobically-adapted cells.** After 1.5 of dark anaerobic acclimation, algal suspensions of wild type (WT, red) and two *flvB* mutants (*flvB-208* in black, and *flvB-308* in grey) were illuminated (660 µmol photons m<sup>-2</sup> s<sup>-1</sup> green light). Gas exchange was measured using a MIMS and PSII yields were determined using a PAM. Gross oxygen evolution was determined from PSII yields. The minimal gross oxygen uptake was calculated by subtracting the net oxygen evolution to the calculated gross oxygen evolution. (A) Representative traces of minimal O<sub>2</sub> uptake in the WT and mutant strains. (B) Mean values of minimal O<sub>2</sub> uptake after 1 min, 2 min and 2.5 min illumination. Shown are mean values (+/-SD, n=3 for the mutants, n=6 for the WT). A star marks significant differences (Pvalue <0.05) based on ANOVA analysis (Tukey adjusted P value).