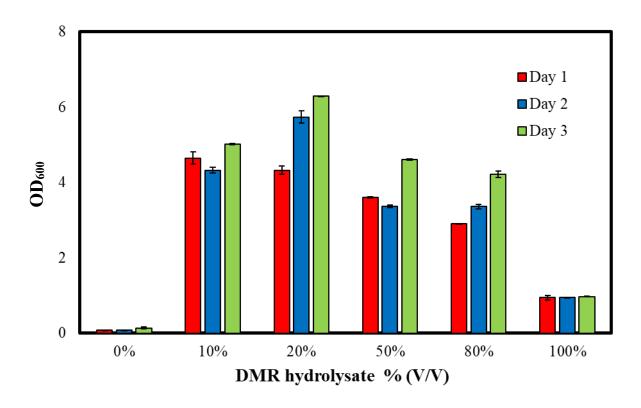
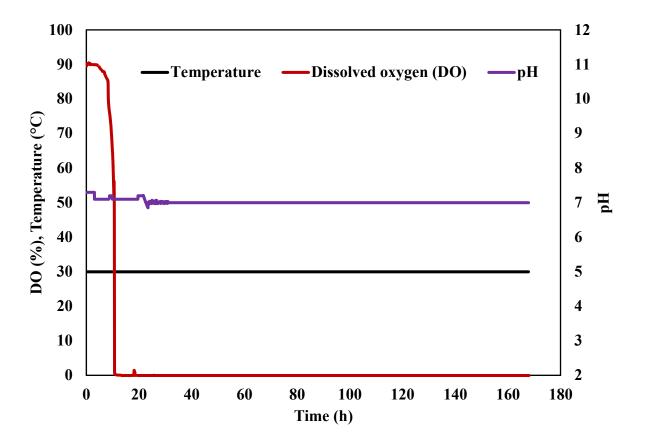
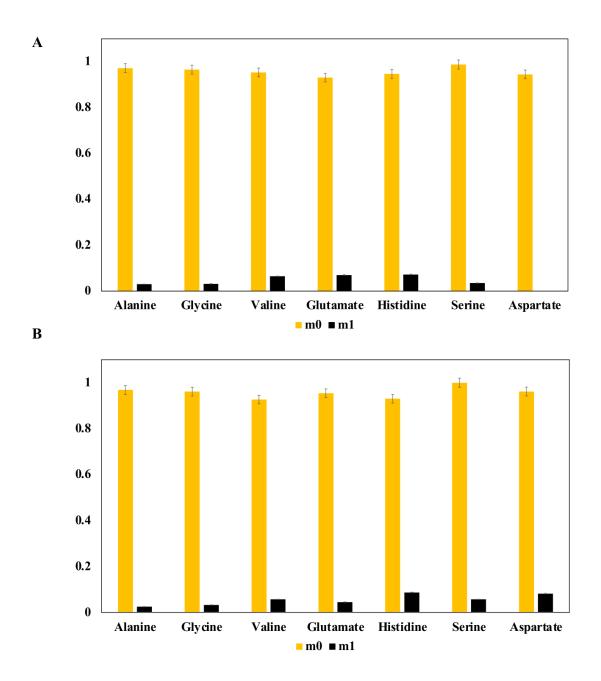
## **Supplementary information**



**Figure S1:** Effect of varying DMR hydrolysate concentrations on the growth (Data represents mean  $\pm$  SD, n=3) of the *C. gluatmicum* strain ATCC 13032.



**Figure S2:** Variations in dissolved oxygen, temperature, and pH with time in a bioreactor during anaerobic fermentation.



**Figure S3**: Mass distribution of amino acids for *C. glutamicum* grown in (A): [U-<sup>13</sup>C] xylose in BTM2 media supplemented with BHI; B) BTM2 media supplemented with BHI but no extra sugars. Error bars indicate 2% technical error of instrument.