Electronic Supplementary Information

**Fig. S1.** Relative abundance and diversity of bacterial phylum and classes of rumen bacteria used.
Fig. S2. Contour map of Stokes shift.
**Fig. S3.** Fluorescence EEMs of DOM in D$_0$, D$_5$, D$_{25}$, and D$_{55}$ samples during anaerobic digestion of oil crop straw.
Fig. S4 split half validation of the three fluorescent components via PARAFAC analysis