

Supplementary information

Fig. SI 1. Control monocultures of *G. metallireducens* (a) and *M. barkeri* (b) were cultivated in IET-P medium containing ethanol (20 mM) and either GO or rGO. Concentrations of methane and ethanol were measured periodically during cultivations. Data are presented as the means of three independent cultures, and error bars represent standard deviations.

