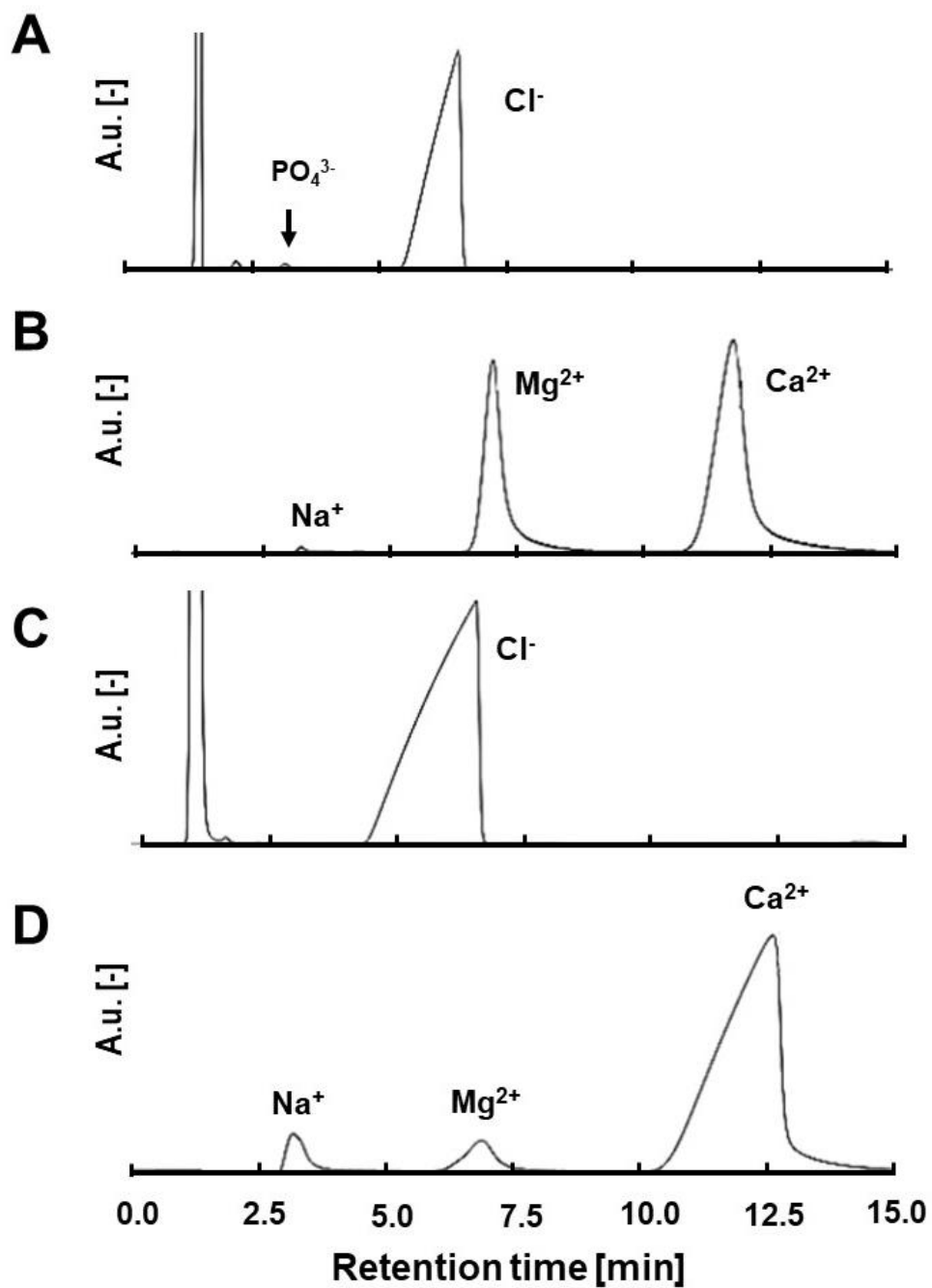
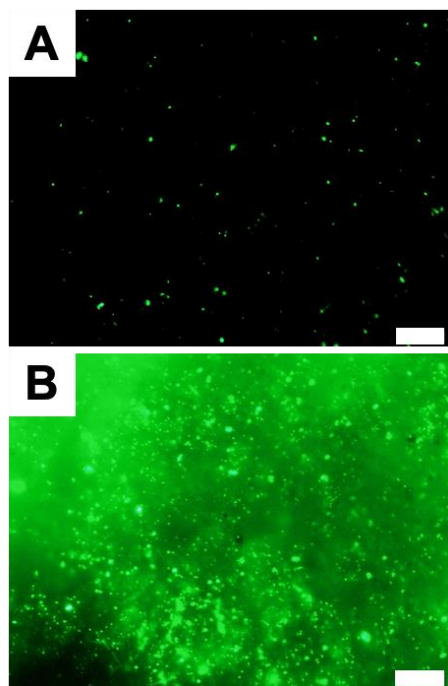


Supplement Figure S1: The illustration (A) and apparatus (B) of the reactor used for the LSV experiment.



Supplement Figure S2: Identified ions precipitated on the cathode side of ion-exchange membranes in MFCs.

(A) Anions on AEM; (B) Cations on AEM; (C) Anions on CEM; (D) Cations on CEM



Supplement Figure S3: Fluorescence microscopic images of microbes attached to the AEMs before MFC installation (A) and 583d after the operation (B), respectively. The scale bar has 20 μm in length.