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Ozone-Cathode Microbial Desalination Cell; an Innovative Option to Bioelectricity Generation and Water Desalination

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Highlights:

- A new type of electron acceptors, ozone, was evaluated in MDCs.
- 16S rRNA gene sequencing and SEM images used to observe microbial community.
- Salinity removal efficiency above 74% was observed in the O₃-MDC.
- O₃-MDC produced power density of 11 times higher than O₂-MDC.
- *Proteobacteria* are from the dominant microbial communities in anode biofilm.

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