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#### Review

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## ACCEPTED MANUSCRIPT

# Effects of wastewater constituents and operational conditions on the composition and dynamics of anodic microbial communities in bioelectrochemical systems

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### **Abstract**

Over the last decade, there has been an ever-growing interest in bioelectrochemical systems (BES) as a sustainable technology enabling simultaneous wastewater treatment and biological production of, e.g. electricity, hydrogen, and further commodities. A key component of any BES degrading organic matter is the anode where electric current is biologically generated from the oxidation of organic compounds. The performance of BES depends on the interactions of the anodic microbial communities. To optimize the operational parameters and process design of

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