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Rich growth medium promotes an increased on Mn(II) removal and manganese oxide production by *Serratia marcescens* strains isolates from wastewater

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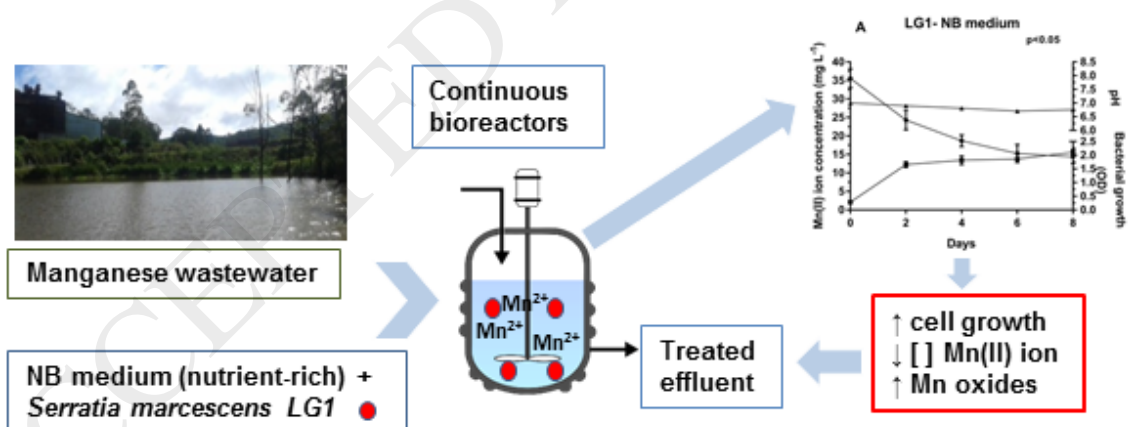
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† Electronic supplementary information

Graphical abstract



Highlights

- *Serratia marcescens* strains exhibited high tolerance to Mn(II) (0–2000 mg L⁻¹)
- NB medium greatly influenced the Mn removal and oxide formation
- EDX analysis revealed Mn outside of the cell for non-pigmented CL11 strain
- EELS analysis revealed Mn inside the cell for pigmented LG1 strain
- Both strains showed a good performance, especially the pigmented strain

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