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Title: Efficient in-situ production of hydrogen peroxide using a novel stacked electrosynthesis reactor

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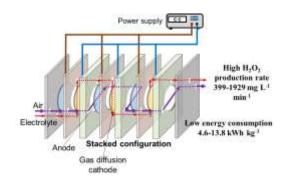
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Graphical abstract



Highlight

- A novel stacked electrosynthesis reactor was developed for in situ H₂O₂ production.
- High cathode specific area and small electrode spacing may improve H₂O₂ production.
- H₂O₂ production rate was more than 160 times of those reported in the literature.
- Low energy consumption of 4.6 kWh kg⁻¹ was resulted from low internal resistance.

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