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Effect of initial pH, operating temperature, and dissolved oxygen concentrations on performance of pyrite-fuel cells in the presence of *Acidithiobacillus ferrooxidans*

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Highlights

- Pyrite fuel cells (PFCs) generate electricity and dissolve pyrite simultaneously
- Maximum power density and current density were used to evaluate PFCs performance
- The performance of the biotic PFCs was better than the abiotic PFCs
- The performance of PFCs depends on initial pH, temperature, and DO conditions
- Purging for DO adjustment may interfere with bacteria reducing performance of PFCs

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