# Article information:

Nitrogen-doped porous carbon fiber with enriched Fe2N sites: Synthesis and application as efficient electrocatalyst for oxygen reduction reaction in microbial fuel cells - ScienceDirect
<https://www.sciencedirect.com/science/article/abs/pii/S002197972200337X?via%3Dihub>

# Article summary:

1. A nitrogen-doped porous carbon fiber with enriched Fe2N sites was developed as a high performance electrocatalyst for oxygen reduction reaction in microbial fuel cells.

2. The synergetic effect of abundant Fe2N and hierarchical porous structure with pyrrolic nitrogen endues the catalyst superior catalytic performance to commercial Pt/C.

3. The Fe2N/NPCF catalyst exhibits higher maximum power density and better long term stability than that of commercial Pt/C in single chamber MFCs.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable, as it provides detailed information about the synthesis and application of the nitrogen-doped porous carbon fiber with enriched Fe2N sites as an efficient electrocatalyst for oxygen reduction reaction in microbial fuel cells. The article also includes a comprehensive experimental section, results and discussion, conclusions, acknowledgements, references, and supplementary material which all contribute to its credibility. However, there are some potential biases that should be noted. For example, the article does not explore any counterarguments or present both sides equally; instead it focuses solely on the positive aspects of the nitrogen-doped porous carbon fiber with enriched Fe2N sites as an efficient electrocatalyst for oxygen reduction reaction in microbial fuel cells. Additionally, there is no mention of possible risks associated with using this type of catalyst or any other potential drawbacks that could arise from its use. Furthermore, while the article does provide evidence for its claims made throughout the text, it could benefit from providing more evidence to further support these claims and make them more convincing to readers.

# Topics for further research:

* Risks associated with nitrogen-doped porous carbon fiber
* Potential drawbacks of using nitrogen-doped porous carbon fiber
* Advantages of using nitrogen-doped porous carbon fiber
* Fe2N sites in microbial fuel cells
* Oxygen reduction reaction in microbial fuel cells
* Synthesis of nitrogen-doped porous carbon fiber

# Report location:

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