

Bioelectrofuel synthesis by nanoenzymes : novel alternatives to conventional enzymes

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ABSTRACT

Recent bioinspired efforts of designing novel nanoenzyme-based electrocatalysts are driven by the urgency of making bioelectrofuels more affordable and efficient. Unlike natural enzymes, nanoenzyme-modified electrodes with large surface areas enclose numerous biomimicking active sites to facilitate enhanced microbial growth followed by increased reactant-to-bioelectrofuel conversion.

KEYWORDS

Nanoenzyme; Enzyme mimicry; Enzyme activity; Microbial electrochemical technology; Electrofuels

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