

Highlighted is a review by Dr. Xu of China Jiliang University and Dr. Xiao of Zhejiang University of Science and Technology covering the mechanisms, strategies, and challenges in the field of pyro-catalysis.

Toward enhanced pyro-catalysis performance: mechanisms, strategies and challenges

Pyro-catalysis is triggered by minute temperature fluctuations, has potential in sterilization, tumor therapy, pollutant decomposition, and hydrogen production. It recycles waste energy but needs efficiency improvements in thermal cycling, temperature fluctuation rate, and carrier separation. This review covers its mechanisms, advancements, and optimization strategies, aiding material design and offering new research insights.

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