# Article information:

Catalytic ozonation of VOCs at low temperature: A comprehensive review - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S030438942101815X?via%3Dihub>

# Article summary:

1. Catalytic ozonation at low temperature is a promising method for VOCs elimination.

2. Different catalysts can be used to enhance the performance of catalytic ozonation.

3. Enhanced VOCs oxidation can be achieved through combined processes with plasma and vacuum ultraviolet.

# 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 “Catalytic Ozonation of VOCs at Low Temperature: A Comprehensive Review” provides an overview of the current state of catalytic ozonation as a method for eliminating volatile organic compounds (VOCs). The article is well-structured and provides a comprehensive review of the topic, including general reaction mechanisms, influence of reaction conditions, enhanced oxidation via ozone-generating systems, and existing challenges. The article also presents potential perspectives for further research in this field.

The article is generally reliable and trustworthy, as it draws on multiple sources to support its claims and provides detailed information about the various aspects of catalytic ozonation. However, there are some potential biases that should be noted. For example, the article focuses mainly on the advantages of catalytic ozonation without providing an equal amount of information about its disadvantages or limitations. Additionally, while the article does mention some possible risks associated with catalytic ozonation (e.g., deactivating, poisoning, coking, and sintering of catalysts), it does not provide any detailed information about these risks or how they can be mitigated. Furthermore, while the article mentions some potential counterarguments to its claims (e.g., high energy consumption), it does not explore these arguments in detail or provide evidence to refute them. Finally, while the article does provide some promotional content about the potential benefits of catalytic ozonation (e.g., low temperature operation), it does not present both sides equally or explore any possible drawbacks associated with this technology.

In conclusion, while “Catalytic Ozonation of VOCs at Low Temperature: A Comprehensive Review” is generally reliable and trustworthy overall, there are some potential biases that should be noted when evaluating its trustworthiness and reliability.

# Topics for further research:

* Disadvantages of catalytic ozonation
* Mitigation of catalytic ozonation risks
* Counterarguments to catalytic ozonation
* High energy consumption of catalytic ozonation
* Drawbacks of low temperature catalytic ozonation
* Promotional content about catalytic ozonation

# Report location:

<https://www.fullpicture.app/item/6fa612873854403f794ad3c311e8e166>