# Article information:

Evolution of photocatalytic membrane for antibiotics degradation: Perspectives and insights for sustainable environmental remediation - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S2214714422007863>

# Article summary:

1. This article provides an overview of the use of photocatalytic membrane technology to treat antibiotics in wastewater.

2. TiO2 and g-C3N4 are the most common photocatalysts used for both ceramic and polymeric membranes.

3. Process parameters, such as light, have a significant impact on energy consumption and cost of PM technology.

# 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 “Evolution of photocatalytic membrane for antibiotics degradation: Perspectives and insights for sustainable environmental remediation” is a comprehensive review of the potential applications of photocatalytic membrane (PM) technology to treat antibiotics in wastewater. The article provides an overview of the different configurations of PM, materials used as the membrane base, factors influencing performance, and energy consumption and economic evaluations. The authors provide a thorough review of the literature on this topic, citing numerous studies to support their claims.

The article does not appear to be biased or one-sided in its reporting; it presents both sides equally by providing evidence from multiple sources to support its claims. Furthermore, it does not contain any promotional content or partiality towards any particular method or technology. The authors also note possible risks associated with using PM technology, such as formation of secondary waste and difficult reuse.

However, there are some points that could be further explored in future research on this topic. For example, while the authors discuss various process parameters that influence energy consumption and cost of PM technology, they do not provide any evidence for these claims or explore counterarguments that may exist regarding these parameters. Additionally, while they mention potential applications for solar powered PM to treat antibiotics in aquaculture effluent, they do not provide any evidence or further discussion on this point.

In conclusion, this article provides a comprehensive overview of the potential applications for photocatalytic membrane (PM) technology to treat antibiotics in wastewater with minimal bias or one-sided reporting. However, there are some points that could be further explored in future research on this topic such as providing evidence for process parameters influencing energy consumption and cost of PM technology and exploring potential applications for solar powered PM to treat antibiotics in aquaculture effluent.

# Topics for further research:

* Photocatalytic membrane technology for antibiotics degradation
* Solar powered photocatalytic membrane technology
* Aquaculture effluent treatment with photocatalytic membrane
* Secondary waste formation from photocatalytic membrane
* Reuse of photocatalytic membrane
* Economic evaluation of photocatalytic membrane technology

# Report location:

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