# Article information:

Review of hydrogen safety during storage, transmission, and applications processes - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S0950423021001790>

# Article summary:

1. Hydrogen is a sustainable solution for reducing greenhouse gas emissions, but its flammability raises safety concerns.

2. Hazards associated with hydrogen include release and ignition leading to jet fires and explosions, as well as potential damage to humans, the environment, and structures.

3. Computational fluid dynamics (CFD) simulations are reliable tools for assessing hydrogen safety during storage, transmission, and application processes.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

本文主要介绍了氢气在储存、传输和应用过程中的安全问题。文章指出，尽管氢气具有可持续性和高能量密度等优点，但其易燃性也引起了公众的担忧。文章列举了一些与液态氢处理相关的事故，并提到了一些预防措施。

然而，本文存在一些潜在偏见和不足之处。首先，文章没有充分探讨其他可能存在的风险因素，例如氢气泄漏对环境的影响以及使用氢气所需的大量能源等问题。其次，文章没有平等地呈现双方观点，只强调了氢气作为清洁能源的优点，并未提及其缺点或替代品。

此外，文章中提到了一些事故案例，但并未提供足够的证据来支持其结论。例如，在描述1989年LH2储罐爆炸事件时，并未说明该事件是否与储罐设计或操作有关。同样，在描述加州化工厂和挪威公共加油站事故时，并未说明是否存在其他因素导致事故发生。

总之，本文虽然对氢气安全问题进行了介绍和讨论，但存在一定程度上的片面报道和偏袒现象。为了更全面地评估氢气作为清洁能源的可行性和安全性，需要进一步深入研究并考虑多种因素。

# Topics for further research:

* Environmental impact of hydrogen leaks
* Energy requirements for hydrogen production and transportation
* Alternatives to hydrogen as a clean energy source
* Potential biases in the article's presentation of information
* Lack of evidence supporting conclusions about accidents mentioned
* Need for further research and consideration of multiple factors in evaluating hydrogen as a clean energy source.

# Report location:

<https://www.fullpicture.app/item/42a86439a707d0cc8d2cfc82af6d9a9b>