# Article information:

Deforming lanthanum trihydride for superionic conduction | Nature
<https://www.nature.com/articles/s41586-023-05815-0>

# Article summary:

1. Rare earth trihydrides (REHx) have potential for superionic conduction of hydride ions, enabling the development of hydride ion batteries and fuel cells.

2. High-energy ball milling can be used to purposely create lattice defects and nanosized grains in REHx to manipulate their electronic conductivity.

3. Mechanochemically synthesized LaHx samples showed improved ionic conductivity compared to conventionally prepared LaHx samples.

# 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:

该文章介绍了一种通过变形稀土三氢化物实现超离子导电的方法。然而，该文章存在一些潜在的偏见和不足之处。

首先，该文章没有提及可能的风险和限制条件。例如，稀土元素是非常珍贵的资源，其开采和加工可能会对环境造成负面影响。此外，该方法是否可行还需要进一步研究和验证。

其次，该文章可能存在片面报道和缺失考虑点。例如，在介绍其他固体电解质时，该文章只提到了它们的优点，并没有提到它们的局限性和缺点。此外，在介绍稀土三氢化物时，该文章只关注了其超离子导电性能，并未探讨其其他性质和应用。

第三，该文章可能存在无根据的主张和缺失证据。例如，在介绍氢离子导体时，该文章声称这些材料可以用于新型氢离子电池和燃料电池等领域，但并未提供相关实验数据或案例来支持这些主张。

第四，该文章可能存在偏袒现象。例如，在介绍球磨法合成稀土三氢化物时，该文章强调了故意制造晶格缺陷的优点，但并未提及这些缺陷可能会对材料的其他性质产生负面影响。

综上所述，该文章存在一些潜在的偏见和不足之处，需要更加客观和全面地呈现相关信息。

# Topics for further research:

* Potential risks and limitations of the method
* Biased reporting and missing considerations
* Lack of evidence and unfounded claims
* Favoritism towards certain aspects of the method
* Other properties and applications of rare earth hydrides
* Negative effects of intentionally creating lattice defects in the synthesis process

# Report location:

<https://www.fullpicture.app/item/5f9df7b36a67118198d646f677a7d1d0>