# Article information:

From evidence to new high-entropy alloys | Nature Computational Science  
<https://www.nature.com/articles/s43588-021-00100-4>

# Article summary:

1. High-entropy alloys (HEAs) are alloys consisting of multi-principal elements with the same or nearly the same concentration, and possess unique properties that are absent in conventional alloys.

2. Efficiently selecting elements to discover novel HEAs is a daunting task due to the exponential growth of possible combinations as the number of elements increases.

3. Minh-Quyet Ha and colleagues have developed an evidence-based recommender system (ERS) for predicting novel HEA candidates by using pieces of evidence from existing alloy databases.

# 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:

作为一篇科学论文，该文章并没有明显的偏见或宣传内容。然而，它可能存在一些片面报道和缺失的考虑点。例如，文章没有提到HEAs可能存在的负面影响或风险，如环境污染或生物毒性。此外，文章也没有探讨如何解决这些问题。

另外，该文章提出了一个基于数据驱动的方法来预测新的HEA候选者。然而，它并没有详细说明这个方法是如何工作的，并且没有提供足够的证据来支持其有效性。因此，在未经进一步验证之前，这种方法可能存在不确定性和局限性。

总体而言，该文章提供了有价值的信息和思路，但需要更多研究来验证其可行性和实用性，并且需要更全面地考虑潜在的风险和负面影响。

# Topics for further research:

* Negative effects of HEAs
* Environmental pollution
* Biological toxicity
* Data-driven method for predicting HEA candidates
* Validity and effectiveness of the method
* Potential risks and negative impacts

# Report location:

<https://www.fullpicture.app/item/c13093e3eccc3e2266b7bc0a3751c702>