# Article information:

A novel consensus learning approach to incomplete multi-view clustering - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S0031320321000777>

# Article summary:

1. Multi-View Clustering (MVC) methods perform better than single-view clustering approaches by exploiting complementary information from multiple views.

2. Incomplete Multi-view Clustering (IMC) methods have emerged to address the challenge of missing instances in multi-view data.

3. Existing IMC methods can be categorized into Matrix Factorization-based and Graph-based approaches, but both face challenges in learning similarity graphs or low-dimensional representations with missing instances.

# 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:

作为一篇科技论文，该文章的内容相对客观，但仍存在一些偏见和不足之处。

首先，文章没有充分考虑到数据缺失可能会对结果产生的影响。虽然提到了一些针对不完整多视图数据的聚类方法，但并没有深入探讨这些方法的局限性和风险。在实际应用中，数据缺失可能会导致聚类结果出现偏差或错误，因此需要更加谨慎地处理。

其次，文章在介绍现有的多视图聚类方法时存在一定的片面性。例如，在介绍基于核的多视图聚类方法时只提到了一种方法，并未全面涵盖该领域内的其他研究成果。这可能会给读者留下不完整或误导性的印象。

此外，在介绍现有研究成果时，文章也存在一定程度上的宣传倾向。例如，在介绍某个算法时使用了“intuitively”等词汇来强调其直观性和易理解性，但并未提供足够的证据来支持这种说法。

最后，文章在探讨不完整多视图聚类问题时也存在一定程度上的偏袒。虽然提到了两种主要类型的解决方案（基于矩阵分解和基于图形），但似乎更倾向于前者，并未充分探讨后者可能具有的优势和适用场景。

总之，尽管该文章在介绍多视图聚类问题及其解决方案方面提供了一些有价值的信息，但仍需要更加客观、全面地呈现相关内容，并注意避免任何潜在偏见或宣传行为。

# Topics for further research:

* Limitations of incomplete data in multi-view clustering
* Comprehensive review of kernel-based multi-view clustering methods
* Objective evaluation of the intuitiveness of clustering algorithms
* Exploration of advantages and applications of graph-based multi-view clustering
* Balanced presentation of matrix factorization and graph-based solutions for incomplete multi-view clustering
* Avoidance of bias and promotion in discussing multi-view clustering research.

# Report location:

<https://www.fullpicture.app/item/e885cb5b8667d86afc1864177b88f2a5>