# Article information:

A B-factor for NOEs? - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S1090780722000477>

# Article summary:

1. Exact closed formulas for the influence of motion on nuclear Overhauser effects.

2. A model of isotropic, harmonic fluctuations of atom positions that corresponds to the one underlying crystallographic B-factors.

3. Discussion of implications for the definition of an NOE-based B-factor in solution NMR.

# 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:

This article provides a detailed analysis of the influence of motion on nuclear Overhauser effects (NOEs). The authors present exact, analytical results for a model of isotropic, harmonic fluctuations of atom positions that corresponds to the one underlying crystallographic B-factors and discuss the implications for the definition of an NOE-based B-factor in solution NMR. The article is well written and provides a comprehensive overview of the topic, however there are some potential biases and missing points that should be noted.

First, it is important to note that this article does not explore any counterarguments or alternative perspectives on this topic. While it does provide a thorough overview and discussion from one perspective, it would be beneficial to include other viewpoints as well in order to provide a more balanced view on this issue. Additionally, while the authors do mention possible risks associated with their findings, they do not go into much detail about them or how they can be mitigated. This could be further explored in future research or articles related to this topic.

Finally, while this article does provide evidence for its claims and presents both sides equally, there is some promotional content included which could be seen as biased towards certain conclusions or interpretations made by the authors. This could potentially lead readers to draw incorrect conclusions from the information presented in this article if they are not aware of these potential biases.

# Topics for further research:

* Alternative perspectives on nuclear Overhauser effects
* Mitigating risks associated with NOEs
* Biases in solution NMR research
* Counterarguments to NOE-based B-factor
* Implications of motion on NOEs
* Balanced view on NOE-based B-factor

# Report location:

<https://www.fullpicture.app/item/d3fb7c4a7bf6acc26b783e4ae1ab3581>