# Article information:

Efficient Reverse Intersystem Crossing in Carbene‐Copper‐Amide TADF Emitters via an Intermediate Triplet State - Zobel - Angewandte Chemie International Edition - Wiley Online Library
<https://onlinelibrary.wiley.com/doi/abs/10.1002/anie.202217620>

# Article summary:

1. Reverse intersystem crossing (rISC) in metal-contained TADF emitters is still not fully understood.

2. Nonadiabatic dynamics simulations of rISC in a carbene-copper(I)-carbazolyl TADF emitter demonstrate efficient rISC on a picosecond time scale.

3. The mechanism involves an intermediate higher-lying triplet state of metal-to-ligand charge transfer character, which enables large spin-orbit couplings with the lowest singlet charge transfer state and returns to a co-planar coordination geometry that presents high fluorescence efficiency.

# 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:

The article is generally reliable and trustworthy, as it provides detailed information about the research conducted and its findings. The authors have provided evidence for their claims by conducting nonadiabatic dynamics simulations of reverse intersystem crossing (rISC) in a carbene-copper(I)-carbazolyl TADF emitter, demonstrating efficient rISC on a picosecond time scale. The article does not appear to be biased or one-sided, as it presents both sides of the argument equally and does not promote any particular point of view. Furthermore, the article does not contain any promotional content or partiality towards any particular viewpoint.

The article could be improved by providing more detail about the potential risks associated with this research, such as possible environmental impacts or safety concerns related to the use of metal compounds in this type of experiment. Additionally, the article could explore counterarguments to its findings and provide more evidence for its claims by citing other relevant studies or experiments that support its conclusions.

# Topics for further research:

* Carbene-copper(I)-carbazolyl TADF emitter
* Reverse intersystem crossing (rISC)
* Nonadiabatic dynamics simulations
* Environmental impacts of metal compounds
* Safety concerns related to metal compounds
* Counterarguments to reverse intersystem crossing research

# Report location:

<https://www.fullpicture.app/item/a21ea5bd4b39d190c5e75ef543734985>