# Article information:

Site-Selective Oxidative Coupling Reaction of Diamines toward Aminoazo Compounds | Organic Letters  
<https://pubs.acs.org/doi/full/10.1021/acs.orglett.2c04242>

# Article summary:

1. Azo compounds are widely used in industrial materials, but the oxidative coupling of polyamines to form aminoazo compounds is difficult and can lead to a variety of isomers.

2. A direct selective oxidative coupling reaction has been developed as an elegant and convenient method for obtaining aminoazo compounds, allowing for easier mass industrial production.

3. The N-NH2 group on 3,4-diamino-1,2,4-triazole was directly coupled with potassium permanganate as the coupling reagent and the aminoazo product was easily separated.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

This article provides a detailed overview of a new method for synthesizing aminoazo compounds through a direct selective oxidative coupling reaction of polyamines. The authors provide evidence from both experimental and theoretical results that demonstrate the potentials of these compounds as high-performance energetic materials. The article is well written and provides clear explanations of the methods used in the synthesis process.

The trustworthiness and reliability of this article can be assessed by looking at its potential biases and their sources, one-sided reporting, unsupported claims, missing points of consideration, missing evidence for the claims made, unexplored counterarguments, promotional content, partiality, whether possible risks are noted, not presenting both sides equally etc. In this case there does not appear to be any bias or one-sided reporting as the authors present both sides equally when discussing previous methods used to synthesize aminoazo compounds. Furthermore they provide evidence from experimental and theoretical results that support their claims about the potentials of these compounds as high performance energetic materials. There are no unsupported claims or missing points of consideration in this article either as all relevant information is provided throughout the text. Additionally there is no promotional content or partiality present in this article as it focuses solely on providing an objective overview of the synthesis process without any attempts to promote or favour any particular side or opinion. Finally possible risks associated with using these compounds are noted throughout the text which further adds to its trustworthiness and reliability.

In conclusion this article appears to be trustworthy and reliable due to its lack of bias or one sided reporting along with its inclusion of evidence from experimental and theoretical results that support its claims about these compounds being potentially useful as high performance energetic materials.

# Topics for further research:

* Synthesis of aminoazo compounds
* Selective oxidative coupling reaction
* High performance energetic materials
* Potential risks of using aminoazo compounds
* Experimental and theoretical results
* Previous methods of synthesizing aminoazo compounds

# Report location:

<https://www.fullpicture.app/item/7a789e22b8a882897180f4be51b32da6>