# Article information:

Chemistry of Polydopamine – Scope, Variation, and Limitation - Liebscher - 2019 - European Journal of Organic Chemistry - Wiley Online Library
<https://chemistry-europe.onlinelibrary.wiley.com/doi/abs/10.1002/ejoc.201900445>

# Article summary:

1. Polydopamine (PDA) is a polymer easily obtained by oxidation of dopamine, composed of indole and dopamine units in various oxidation states and to a lesser extent of pyrroles.

2. PDA adheres to all type of surfaces due to its abundant catechol moieties assisted by amino groups, making it interesting for various applications in biology, biomedicine, membranes, catalysis, materials and water purification.

3. Analogues are obtained by two strategies: post-modification of PDA and oxidative polymerization of dopamine analogues.

# 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 written by Jürgen Liebscher from the Institute of Chemistry at Humboldt-University Berlin and is published in the European Journal of Organic Chemistry. The article provides an overview about the chemistry and properties of polydopamine (PDA) and its analogues with a focus on recent publications as well as their widespread applications.

The article appears to be reliable as it provides detailed information about PDA, its structure, properties, synthesis methods, applications and potential future research directions. The author also cites 109 references which adds credibility to his claims.

However, there are some points that could be improved upon such as providing more detail on the potential risks associated with using PDA or exploring counterarguments to some of the claims made in the article. Additionally, while the author does provide an overview about recent publications related to PDA research, he does not provide any analysis or comparison between them which could have been useful for readers looking for more detailed information on this topic.

# Topics for further research:

* Polydopamine toxicity
* Polydopamine synthesis methods
* Polydopamine applications
* Polydopamine analogues
* Polydopamine research directions
* Polydopamine publications comparison

# Report location:

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