# Article information:

Tailoring the Shape of Anisotropic Core–Shell Au–Ag Nanoparticles in Dimethyl Sulfoxide | Chemistry of Materials
<https://pubs.acs.org/doi/full/10.1021/acs.chemmater.8b04735>

# Article summary:

1. Nanomaterials have a wide range of applications in chemistry, physics, and biology due to their specific properties at the nanoscale.

2. Seed-mediated growth is a powerful method for producing monodisperse metal nanoparticles with controlled size and shape.

3. This article explores the use of dimethyl sulfoxide (DMSO) as a shape-directing agent for the synthesis of core–shell Au–Ag nanoparticles in water with tunable shell thickness.

# 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 “Tailoring the Shape of Anisotropic Core–Shell Au–Ag Nanoparticles in Dimethyl Sulfoxide” provides an overview of the potential applications of nanomaterials and describes a seed-mediated growth approach for producing monodisperse metal nanoparticles with controlled size and shape. The article then focuses on the use of dimethyl sulfoxide (DMSO) as a shape-directing agent for the synthesis of core–shell Au–Ag nanoparticles in water with tunable shell thickness.

The article is generally well written and provides an informative overview of its topic, however there are some areas that could be improved upon. For example, while the article does provide some evidence to support its claims, it does not explore any counterarguments or present both sides equally. Additionally, there is no discussion about possible risks associated with using DMSO as a shape-directing agent or any mention of potential biases or sources of bias that could affect the results presented in this study. Furthermore, there is no mention of any limitations or caveats associated with this research which could lead to readers overestimating its implications or conclusions.

In conclusion, while this article provides an informative overview on its topic, it could benefit from further exploration into potential biases and sources of bias as well as more discussion about possible risks associated with using DMSO as a shape-directing agent and any limitations or caveats associated with this research.

# Topics for further research:

* Potential risks of using DMSO
* Sources of bias in nanoparticle synthesis
* Limitations of seed-mediated growth approach
* Implications of core–shell Au–Ag nanoparticles
* Counterarguments to shape-directing agent
* Safety of using DMSO in water

# Report location:

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