# Article information:

Approaches to Sustainability in Chemical Mechanical Polishing (CMP): A Review | SpringerLink  
<https://link.springer.com/article/10.1007/s40684-021-00406-8>

# Article summary:

1. Chemical mechanical polishing (CMP) is a planarization method that uses chemical reactions and mechanical forces for material removal.

2. CMP is used for global planarization of surfaces in semiconductor manufacturing, such as shallow trench isolation, inter-layer dielectric formation, tungsten contact formation, and metal wiring formation.

3. This paper reviews the impacts of the CMP process on the environment and various research results to improve sustainability and discusses the future of CMP technology development.

# 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 “Approaches to Sustainability in Chemical Mechanical Polishing (CMP): A Review” provides an overview of the current state of research into approaches to sustainability in chemical mechanical polishing (CMP). The article is well-written and provides a comprehensive overview of the topic, including an introduction to CMP, its applications in semiconductor manufacturing, and its environmental impact. The article also outlines various research efforts aimed at improving sustainability through improved process efficiency and reduced environmental burden.

The article is generally reliable and trustworthy; however, there are some potential biases that should be noted. For example, while the article does provide an overview of research efforts aimed at improving sustainability through improved process efficiency and reduced environmental burden, it does not explore counterarguments or alternative approaches to achieving these goals. Additionally, while the article does discuss potential risks associated with CMP processes, it does not provide any evidence or data to support these claims. Furthermore, while the article does provide a comprehensive overview of current research efforts related to sustainability in CMP processes, it does not present both sides equally; instead focusing primarily on positive aspects such as improved process efficiency and reduced environmental burden without exploring potential drawbacks or challenges associated with these approaches.

In conclusion, this article provides a comprehensive overview of current research efforts related to sustainability in CMP processes; however, there are some potential biases that should be noted when evaluating its trustworthiness and reliability.

# Topics for further research:

* Challenges associated with CMP sustainability
* Alternative approaches to CMP sustainability
* Environmental impacts of CMP processes
* Potential risks of CMP processes
* Benefits of improved CMP process efficiency
* Research into CMP sustainability solutions

# Report location:

<https://www.fullpicture.app/item/ddc11e35fd124dbec7a247142ce4e12f>