# Article information:

Advance and prospect of power battery thermal management based on phase change and boiling heat transfer | Compendex
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# Article summary:

1. Explains the flow status of the working medium in heat transfer process and heat transfer mechanism of pool boiling and in-tube forced convective boiling.

2. Reviews applications and research progress of phase change and boiling heat transfer technology in power battery thermal management from two new perspectives of contact and non-contact.

3. Analyzes future development trend of main phase change and boiling heat transfer technologies for power battery thermal management.

# 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, as it provides a comprehensive review of the latest applications and research progress of phase change and boiling heat transfer technology in the field of power battery thermal management from two new perspectives of contact and non-contact, as well as an analysis on the future development trend of main phase change and boiling heat transfer technologies for power battery thermal management. The authors also provide funding details for their research, which adds to its trustworthiness.

However, there are some potential biases that should be noted. For example, the article does not explore any counterarguments or present both sides equally when discussing the potential applications of phase change and boiling heat transfer technology in power battery thermal management. Additionally, there is no mention of possible risks associated with this technology, which could lead to an overly optimistic view on its potential applications. Furthermore, there is no evidence provided to support some of the claims made by the authors regarding its potential applications or future development trends.

# Topics for further research:

* Risks associated with phase change and boiling heat transfer technology
* Counterarguments to phase change and boiling heat transfer technology
* Advantages and disadvantages of phase change and boiling heat transfer technology
* Applications of phase change and boiling heat transfer technology in power battery thermal management
* Future development trends of phase change and boiling heat transfer technology
* Evidence for potential applications of phase change and boiling heat transfer technology

# Report location:

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