# Article information:

Synergistic Solvation of Anion: An Effective Strategy toward Economical High‐Performance Dual‐Ion Battery - Wang - Advanced Functional Materials - Wiley Online Library
<https://onlinelibrary.wiley.com/doi/10.1002/adfm.202212287>

# Article summary:

1. Dual-ion batteries (DIBs) have received extensive attention due to their novel energy storage mechanism based on both anions and cations.

2. Solvation of PF6− mainly rests on the hydrogen bonds between the fluorine atoms of PF6− and the hydrogen atoms of alkyl groups in organic solvents.

3. A series of low-cost binary electrolyte solutions based on the combination of characteristic moieties were tested, with methyl acetate/diethyl carbonate being found to be most suitable for solvating PF6− and conferring comparable performance of graphite positive electrode in DIBs.

# 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:

The article is generally reliable and trustworthy, as it provides a comprehensive overview of the research conducted by Wang et al., which was published in Advanced Functional Materials journal. The article is well-structured and clearly explains the research process, findings, and conclusions. It also provides detailed information about the materials used in the experiment, such as EMC, DMC, DEC, MA, etc., as well as their physical properties (melting point/boiling point/flash point). Furthermore, it includes a table that compares these materials’ physicochemical properties for easy reference.

The article does not appear to be biased or one-sided; rather it presents both sides equally by providing evidence for its claims and exploring counterarguments. Additionally, there is no promotional content or partiality present in the article; instead it focuses solely on presenting facts and data related to its research topic. The article also mentions potential risks associated with using certain materials for solvation purposes but does not go into detail about them.

In conclusion, this article is reliable and trustworthy due to its comprehensive coverage of its research topic without any bias or promotional content present.

# Topics for further research:

* Solvation properties of EMC
* Melting point of DMC
* Boiling point of DEC
* Flash point of MA
* Potential risks of solvation materials
* Advanced Functional Materials journal

# Report location:

<https://www.fullpicture.app/item/23ac98d557365f4d890687b58fbd6e2a>