# Article information:

Solid‐State Lithium/Selenium–Sulfur Chemistry Enabled via a Robust Solid‐Electrolyte Interphase - Xu - 2019 - Advanced Energy Materials - Wiley Online Library  
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# Article summary:

1. Lithium/selenium (Li/Se) batteries have attracted research interest due to their high volumetric capacity and electronic conductivity.

2. A solid-electrolyte interphase (SEI) design was used to manipulate the interfacial chemistry of Se-S cathodes, which enabled a one-step solid-state lithiation process instead of the conventional two-step solid–liquid–solid reaction.

3. An amorphous Se-doped S22.2Se/Ketjenblack cathode with extraordinary electrochemical performance was developed, which could enable the use of high pore volume large porous carbon as a promising host material for high-loading Se-S cathodes.

# 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 and trustworthy in its reporting of the research conducted by Xu et al., 2019. The authors provide detailed information about their methods and results, including descriptions of the materials used, experimental procedures, data analysis techniques, and results obtained from various spectroscopy analyses. The authors also provide evidence for their claims through figures and tables that illustrate their findings in an easy to understand manner.

However, there are some potential biases in the article that should be noted. For example, the authors focus mainly on the advantages of using Li/Se batteries over Li/S batteries without exploring any potential drawbacks or risks associated with this technology. Additionally, while they do mention other studies related to Li/Se batteries, they do not present both sides equally or explore counterarguments to their own claims. Furthermore, some of the claims made by the authors are unsupported or lack evidence; for example, they state that Li/Se batteries are more compatible with carbonate electrolytes than Li/S batteries without providing any evidence to back up this claim.

In conclusion, while this article is generally reliable and trustworthy in its reporting of Xu et al.'s research findings, there are some potential biases that should be noted when evaluating its trustworthiness and reliability.

# Topics for further research:

* Li/Se battery drawbacks
* Li/Se battery risks
* Li/Se battery compatibility
* Li/S battery advantages
* Carbonate electrolyte compatibility
* Li/Se battery counterarguments

# Report location:

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