# Article information:

Liquid-Free Ion-Conducting Elastomer with Environmental Stability for Soft Sensing and Thermoelectric Generating | ACS Applied Materials & Interfaces
<https://pubs.acs.org/doi/full/10.1021/acsami.2c09208>

# Article summary:

1. Soft electronics based on stretchable conducting materials have been receiving much attention for their potential applications in a variety of fields.

2. Existing stretchable conducting materials are usually fabricated by blending stretchable polymers with electronic or ionic conductive fillers, but there is a risk of liquid leakage from these materials during large deformation or long-time storage.

3. This article presents an LFICE (liquid-free ion-conducting elastomer) that combines dry ionic conductive fillers with all-solid-state elastomeric polymers, which has potential applications in triboelectric nanogenerators and human motion monitoring, as well as temperature-dependent thermal response and thermoelectric generating.

# 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, providing a comprehensive overview of the current state of research into liquid-free ion-conducting elastomers (LFICEs). The authors provide a clear explanation of the advantages of LFICEs over existing stretchable conducting materials, such as their environmental stability and lack of liquid leakage during large deformation or long-time storage. The authors also discuss the potential applications of LFICEs in triboelectric nanogenerators, human motion monitoring, temperature-dependent thermal response and thermoelectric generating.

The article does not appear to be biased or one-sided; it provides an objective overview of the current state of research into LFICEs and their potential applications. It does not make unsupported claims or omit any points of consideration; instead, it provides detailed explanations and evidence for its claims. Furthermore, the article does not contain any promotional content or partiality; instead, it provides an unbiased overview of the current state of research into LFICEs. Finally, the article does note possible risks associated with using LFICEs; however, it could have explored counterarguments more thoroughly to provide a more balanced view on this topic.

# Topics for further research:

* Liquid-free ion-conducting elastomers applications
* Triboelectric nanogenerators advantages
* Human motion monitoring technology
* Temperature-dependent thermal response materials
* Thermoelectric generating materials
* Liquid-free ion-conducting elastomers risks

# Report location:

<https://www.fullpicture.app/item/def0923d0c1350361543582841a2b0eb>