# Article information:

用于光电和能源应用的基于甘菊烯的分子、聚合物和框架 - 黄 - 2020 - 小方法 - Wiley 在线图书馆  
<https://onlinelibrary.wiley.com/doi/abs/10.1002/smtd.202000628>

# Article summary:

1. This article reviews the use of azulene-based molecules, polymers, and frameworks for photonic and energy applications.

2. Azulene has unique physical and chemical properties, including different reactivity towards five- and seven-membered rings, dark color, narrow gap between highest occupied molecular orbitals and lowest unoccupied molecular orbitals, and stimulated reactions.

3. The article discusses the structure-property relationships of azulene derivatives, their photonic applications, and energy related applications such as near infrared absorption, organic field effect transistors, organic solar cells, and microsupercapacitors.

# 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 in terms of its content. It provides a comprehensive overview of the use of azulene-based molecules for photonic and energy applications. The authors provide detailed information on the structure-property relationships of azulene derivatives as well as their potential applications in various fields. Furthermore, the authors cite relevant literature to support their claims throughout the article.

However, there are some potential biases that should be noted when evaluating this article. For example, the authors do not discuss any possible risks associated with using azulene derivatives or any potential drawbacks to their use in certain applications. Additionally, while they provide an overview of potential applications for these materials in various fields such as photonics and energy storage devices, they do not explore any counterarguments or alternative solutions that may be available for these same problems. Finally, it should also be noted that all authors are affiliated with Shanghai Jiao Tong University which could potentially lead to partiality in their reporting on this topic.

# Topics for further research:

* Azulene derivatives safety
* Photonics applications drawbacks
* Alternative energy storage solutions
* Azulene derivatives environmental impact
* Azulene derivatives toxicity
* Azulene derivatives economic feasibility

# Report location:

<https://www.fullpicture.app/item/5694c318d7f098569e93fca7af9b088f>