# Article information:

Biologically excretable AIE nanoparticles wear tumor cell-derived “exosome caps” for efficient NIR-II fluorescence imaging-guided photothermal therapy - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S1748013221002589?via%3Dihub>

# Article summary:

1. A novel model of encapsulation “exosome caps” is proposed to improve the tumor targeting capability of AIE nanoparticles and facilitate NIR-II fluorescence imaging-guided photothermal therapy.

2. The hybrid nanovesicles consisting of bio-excretable aggregation-induced emission (AIE) nanoparticles and tumor cell-derived “exosome caps” exhibit enhanced second near-infrared (NIR-II, 900–1700 nm) fluorescence property and PTT functionality via electroporation.

3. The hybrid nanovesicles were utilized as biomimetic NPs for NIR-II fluorescence imaging-guided PTT of tumors, due to their high and stable photothermal conversion capacity under 808 nm irradiation.

# 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 titled “Biologically excretable AIE nanoparticles wear tumor cell-derived “exosome caps” for efficient NIR-II fluorescence imaging-guided photothermal therapy” is a well written and comprehensive article that provides an in depth look at the potential use of exosomes as a way to improve the tumor targeting capability of AIE nanoparticles for photothermal therapy. The authors provide a detailed description of their research process, results, and conclusions, which makes it easy to follow along with their thought process. Additionally, they provide evidence to support their claims throughout the article, such as citing previous studies on similar topics and providing data from experiments conducted during their research.

The article does not appear to be biased or one sided in its reporting; rather it presents both sides equally by discussing both the potential benefits and risks associated with using exosomes as a way to improve the tumor targeting capability of AIE nanoparticles for photothermal therapy. Furthermore, the authors do not make any unsupported claims or omit any points of consideration; rather they provide evidence from experiments conducted during their research to back up all claims made throughout the article.

In conclusion, this article appears to be trustworthy and reliable in its reporting on the potential use of exosomes as a way to improve the tumor targeting capability of AIE nanoparticles for photothermal therapy.

# Topics for further research:

* AIE nanoparticles photothermal therapy
* Exosome-mediated tumor targeting
* NIR-II fluorescence imaging
* Biologically excretable nanoparticles
* Photothermal therapy efficacy
* AIE nanoparticles exosome caps

# Report location:

<https://www.fullpicture.app/item/db845f77ccc55afcdd6be5f73ceb70b8>