# Article information:

Web of Science  
<https://www.webofscience.com/wos/woscc/full-record/WOS:000880883100001>

# Article summary:

1. An improved Informed Rapidly-Exploring Random Trees-Star Algorithm (IRRT\*) is proposed by introducing the Artificial Potential Field Method (APF) for mobile robot path planning.

2. The proposed algorithm was validated in simulations and proven to be superior to some other RRT-based algorithms in search time and path length.

3. The proposed algorithm was also tested on a real robotic platform, showing that it can be well executed in real scenarios.

# 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 provides an overview of an improved Informed Rapidly-Exploring Random Trees-Star Algorithm (IRRT\*) by introducing the Artificial Potential Field Method (APF) for mobile robot path planning. The article is written in a clear and concise manner, providing detailed information about the research conducted and its results. The authors provide evidence for their claims through simulations and tests on a real robotic platform, which adds credibility to their findings. Furthermore, the authors provide references to relevant literature, which further strengthens the trustworthiness of the article.

However, there are some potential biases that should be noted when assessing this article's trustworthiness and reliability. Firstly, the authors do not explore any counterarguments or alternative approaches to their research topic, which could lead to a one-sided perspective on the issue being presented. Additionally, there is no mention of possible risks associated with using this algorithm or any potential drawbacks that could arise from its implementation. Finally, while the authors provide evidence for their claims through simulations and tests on a real robotic platform, they do not provide any evidence from other sources such as peer reviews or independent studies that could further support their findings.

In conclusion, while this article provides an overview of an improved IRRT\* algorithm by introducing APF for mobile robot path planning, there are some potential biases that should be taken into consideration when assessing its trustworthiness and reliability such as lack of exploration of counterarguments or alternative approaches to their research topic; lack of mention of possible risks associated with using this algorithm; and lack of evidence from other sources such as peer reviews or independent studies that could further support their findings.

# Topics for further research:

* Mobile robot path planning
* Artificial Potential Field Method
* Informed Rapidly-Exploring Random Trees-Star Algorithm
* Counterarguments to mobile robot path planning
* Risks associated with mobile robot path planning
* Peer reviews of mobile robot path planning

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