# Article information:

Flower-like Nanozyme with Highly Porous Carbon Matrix Induces Robust Oxidative Storm against Drug-Resistant Cancer | ACS Nano
<https://pubs.acs.org/doi/full/10.1021/acsnano.2c12698>

# Article summary:

1. Drug-resistant cancer is a major challenge in cancer treatment due to abnormal metabolism and reactive oxygen species (ROS) leading to therapeutic resistance.

2. Metal-organic framework (MOF)-based carbonized nanozymes have potential for ROS-mediated tumor therapy applications, but their catalytic performance is limited by micropore shrinkage and skeleton collapse.

3. A flower-like nanozyme with a highly porous carbon matrix was developed to induce a robust oxidative storm against drug-resistant cancer by increasing the 3D accessibility of active sites and shortening the distance between catalysts and biomolecules, resulting in cell re-sensitization and boosted inhibition of tumors.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

作为一篇科学研究论文，该文章并没有明显的偏见或宣传内容。然而，它可能存在一些片面报道和缺失的考虑点。

首先，文章强调了治疗耐药性肿瘤的紧迫性和挑战性，但没有提及其他治疗方法或技术的优缺点。这可能导致读者对该方法的效果过于乐观，并忽略了其他潜在的治疗选择。

其次，文章没有探讨该方法可能带来的风险或副作用。例如，高水平ROS产生可能会对正常细胞造成损伤，并引发其他健康问题。此外，使用金属催化剂也可能会引起毒性反应或环境污染等问题。

最后，文章未能平等地呈现双方观点。虽然它提到了耐药性肿瘤细胞对氧化应激的适应能力，但未探讨这种适应机制是否可以被利用来开发更有效的治疗策略。

总之，尽管该文章是一项有价值的科学研究工作，但仍需要更全面、客观地呈现相关信息，并考虑到潜在风险和其他治疗选择。

# Topics for further research:

* Other treatment options for drug-resistant tumors
* Potential risks and side effects of the proposed method
* Impact of high-level ROS production on normal cells
* Toxicity reactions and environmental pollution caused by metal catalysts
* Utilizing adaptive mechanisms of drug-resistant tumor cells for developing more effective treatment strategies
* Need for a more comprehensive and objective presentation of information in the article

# Report location:

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