# Article information:

Review of ultrasonic vibration-assisted machining in advanced materials-All Databases
[https://www.webofscience.com/wos/alldb/full-record/WOS:000566792500005](https://www.webofscience.com/wos/alldb/full-record/WOS%3A000566792500005)

# Article summary:

1. Ultrasonic vibration-assisted machining is a promising technique for advanced materials.

2. The effect of cutting speed and vibration amplitude on cutting forces in ultrasonic-assisted milling has been investigated.

3. Research has been conducted on the formation mechanism of surface morphology in three-excitation ultrasonic spatial vibration-assisted turning.

# 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:

作为一篇学术论文，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，文章主要关注超声波振动辅助加工在先进材料中的应用，但并未探讨其潜在风险和限制。例如，在使用超声波振动辅助加工时可能会产生噪音和振动等环境问题，同时也需要考虑设备成本和维护费用等经济因素。

其次，文章提到了一些研究结果和发现，但并未提供足够的证据来支持这些结论。例如，在“三激励超声空间振动辅助车削”方面的研究中，文章没有详细说明表面形态形成机制的证据。

此外，在作者介绍中提到了作者们的研究资金来源，但并未探讨这种资金来源对研究结果的影响。如果资金来源与某个特定利益相关，则可能会导致偏见或宣传内容。

最后，该文章似乎没有平等地呈现双方观点。虽然它提到了一些反驳意见，并引用了其他相关研究结果，但仍然存在可能忽略或排除其他观点的风险。

总之，尽管该文章是一篇学术论文，并没有明显的偏见或宣传内容，但仍然存在一些片面报道、缺失考虑点和证据不足等问题。

# Topics for further research:

* Potential risks and limitations of ultrasonic vibration-assisted machining
* Lack of evidence to support some research findings and conclusions
* Influence of funding sources on research results
* Possible bias or omission of alternative viewpoints
* Environmental and economic factors to consider in ultrasonic vibration-assisted machining
* Mechanisms behind surface morphology formation in ultrasonic vibration-assisted machining

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