# Article information:

Analytical model for fracture conductivity considering rod proppant in pulse fracturing  
<https://scholar.cnki.net/zn/Detail/index/GARJ2021_3/SJESF37EF7E3E6A639780287CC3886196DB8>

# Article summary:

1. Combination of rod proppants and pulse-fracturing technology can improve productivity of oil and gas wells.

2. Deformation and embedment models of rod proppants are developed to calculate fracture width, and axial and radial distance coefficients are defined to solve the problem of sparse distribution.

3. Fracture conductivity under radial proppant spacing is higher than that under axial proppant spacing, and increasing fracture width and improving radial distribution of rod proppant can effectively improve fracture conductivity.

# 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:

作为一篇学术论文，该文章在理论分析和模型建立方面做得比较充分，但也存在一些问题。

首先，文章没有提及可能的风险和局限性。虽然该技术已经成功应用于许多油气储层，但仍存在一些未知的风险和不确定性。例如，在实际操作中，可能会出现不同于理论预测的情况，导致效果不佳或者产生其他问题。因此，作者应该在文章中提到这些潜在的风险，并对其进行评估和探讨。

其次，文章存在一定的偏袒。作者只关注了使用杆状支撑剂后的优点，并没有充分考虑其缺点和局限性。例如，在实际操作中，使用杆状支撑剂可能会增加成本、增加施工难度等问题。因此，在评估该技术时需要全面考虑其优缺点。

另外，文章没有平等地呈现双方观点。作者只关注了使用杆状支撑剂后的优点，并没有对其他支撑剂进行比较和评估。因此，在评估该技术时需要将其与其他支撑剂进行比较，并综合考虑各种因素来选择最适合的支撑剂。

最后，文章中提出的一些主张缺乏证据支持。例如，作者认为增加裂缝宽度和改善杆状支撑剂的径向分布可以有效提高裂缝导流性，但并没有给出充分的实验证据来支持这些主张。因此，在进一步研究该技术时需要进行更多的实验和数据分析来验证这些主张。

综上所述，虽然该文章在理论分析和模型建立方面做得比较充分，但仍存在一些问题。在评估该技术时需要全面考虑其优缺点，并进行更多的实验和数据分析来验证相关主张。

# Topics for further research:

* Potential risks and limitations of using rod-shaped proppants
* Balanced evaluation of advantages and disadvantages of rod-shaped proppants
* Comparison and evaluation of different types of proppants
* Need for empirical evidence to support claims about improving fracture conductivity
* Comprehensive consideration of various factors in selecting proppants
* Further research and experimentation to validate claims and improve understanding of the technology.

# Report location:

<https://www.fullpicture.app/item/ab52c764a2d8c764b5fa9787ba63bd60>