# Article information:

Sci-Hub | Ultra-low frequency broadband gap optimization of 1D periodic structure with dual power-law acoustic black holes | 10.1177/1045389X211018841  
<https://sci-hub.yt/10.1177/1045389x211018841>

# Article summary:

1. 本文研究了具有双幂律声学黑洞的一维周期结构的超低频宽带间隙优化。研究人员通过调整结构参数，成功地实现了在超低频范围内的宽带间隙效应。

2. 文章介绍了声学黑洞的概念和原理，并提出了一种基于双幂律模型的设计方法。通过选择合适的参数，可以实现对特定频率范围内声波的吸收和反射控制。

3. 研究结果表明，采用双幂律模型设计的一维周期结构能够有效地扩展超低频范围内的宽带间隙。这对于开发新型声学材料和器件具有重要意义，例如用于声波过滤、隔音和减振等应用。

# 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:

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