# Article information:

Enhanced strength and ductility of bulk CoCrFeMnNi high entropy alloy having fully recrystallized ultrafine-grained structure - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S026412751730730X>

# Article summary:

1. 采用高效磁悬浮熔化技术制备了直径为110mm的CoCrFeMnNi高熵合金坯料。

2. 通过简单的冷轧和退火工艺，成功获得了晶粒尺寸最小为503±181nm的全再结晶超细晶粒高熵合金。

3. 超细晶粒高熵合金表现出优异的强韧平衡性能，由于堆垛层错能低，当晶粒尺寸从503nm到88.9μm时，呈现出线性Hall-Petch关系。

# 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:

作为一篇科学论文，该文章的内容相对客观，但仍存在一些偏见和片面报道。首先，文章只关注了高熵合金的强度和延展性等力学性能，并未探讨其它可能存在的问题或风险。其次，文章没有平等地呈现双方，即没有探讨高熵合金可能存在的缺点或局限性。

此外，文章提出了一个新的高效磁悬浮熔化技术来制备高熵合金，但并未提供足够的证据来支持该技术是否真正有效或可靠。同时，在描述实验结果时，文章也没有提供足够的数据或实验细节来支持其主张。

总之，虽然该文章在描述高熵合金力学性能方面具有一定价值，但需要更全面、客观地考虑其它可能存在的问题和风险，并提供更充分、可靠的证据来支持其主张。

# Topics for further research:

* Limitations of high-entropy alloys
* Potential risks of high-entropy alloys
* Validity of high-efficiency magnetic levitation melting technique
* Insufficient evidence to support experimental results
* Need for more comprehensive and objective analysis
* Lack of data and experimental details in article

# Report location:

<https://www.fullpicture.app/item/c23461e9e81fb0391e63adf227ec90bc>