

日期 = 5/6

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題目 = The Nano Frontier - Where Science Meets the Impossible

探索奈米的邊界 = 科學邂逅不可能

Micro/Nano = basic unit of measure is micrometre ( $10^{-6}$ ) or nanometre ( $10^{-9}$ )

Electro = MEMS have electrical components

Mechanical = MEMS have mechanical parts

System = Refers to integration of components.

Hair diameter = 50-100  $\mu\text{m}$

Titanium Advantages:

Resistance to corrosion

High strength.

High melting point.

Non-toxic.

Low thermal expansion.

Excellent fabrication possibilities.

Light in weight.

From Fine grained Metal into Amorphous Metallic Glasses

(非晶質金屬 玻璃)

Metallic Glasses = also known as metallic glass or glassy metal.

如鋼鐵般堅硬, 如塑膠般多變

High strength.

High hardness.

High tensile elongation.

Absence of grain boundary (晶界) and segregation (偏析).

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高熵合金 (High-Entropy alloys)

我不是最好, 但我努力讓自己更好!