

The Nano Frontier: Where Sciences Meets the
impossible

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當金屬材料達到奈米

鈦合金 極為堅固又無比輕

Titanium Advantage

Resistance to corrosion

High Strength

High melting point

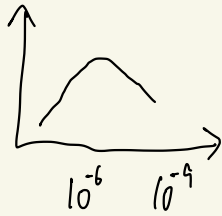
Non-toxic

Low thermal expansion

Excellent fabrication possibility

Light in Weight

Hall-Petch Equation



當材料精度越大，韌性本該越好
但達微米就已經瓶頸

Technology node

Historically, the process node name referred to a number of different features of a transistor including the gate length.

Technology node is the width of line that can be processed with a minimum width. No longer length of transistor is critical at 22nm, 14nm, 10nm and 7nm

In general, smaller node = smaller transistor