

How to Make a High Tc Superconductor

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See Unified Absolute Relativity Theory at:

www.wbabin.net/saraiva/saraiva305.pdf
306.pdf
307.pdf
328.pdf

The mixture of two superconductors produces a new superconductor with higher Tc.
We must get a higher electric charge.

Charge of an element:

$$Q_1 = \rho R^2$$

Charge of a diatomic molecule:

$$Q_2 = 2 \frac{\rho_1 R_1^3 + \rho_2 R_2^3}{R_1 + R_2} ; \quad Q_2 > Q_1$$

ρ - Density; R – Atomic radius; Q – Electric charge.

Electric charge of osmium:

$$10.9 \times 10^{-18} = \frac{137}{2} q_e$$

Electric charge of Sn:

$$4.4 \times 10^{-18} = \frac{137}{5} q_e ; \quad q_e - \text{Electron charge.}$$

$$\left\{ \begin{array}{l} \rho_2 R_2^2 > \rho_1 R_1^2 \\ 2 \frac{\rho_1 R_1^3 + \rho_2 R_2^3}{R_1 + R_2} > \rho_2 R_2^2 \end{array} \right. \Leftrightarrow$$

$$\Leftrightarrow 2\rho_1 R_1^3 - \rho_2 R_2^2 R_1 + \rho_2 R_2^3 > 0$$

$$\frac{dQ}{dR_1} = 0 \quad \Leftrightarrow \quad 2\rho_1 R_1^3 + 3\rho_1 R_1^2 R_2 - \rho_2 R_2^3 = 0$$

$$\Leftrightarrow \quad R_1 = R_2 \frac{-\rho_2 + \sqrt{\rho_2^2 + 24\rho_1\rho_2}}{6\rho_1}$$

Element Re:

$$\rho_1 = 21000 ; \quad R_1 = 1.97 \times 10^{-10}$$

Element Os:

$$\rho_2 = 22600 ; \quad R_2 = 1.92 \times 10^{-10}$$

$$\rho_1 R_1^2 = 8.15 \times 10^{-16} ; \quad \rho_2 R_2^2 = 8.33 \times 10^{-16}$$

$$2 \frac{\rho_1 R_1^3 + \rho_2 R_2^3}{R_1 + R_2} = 1.65 \times 10^{-15}$$

$$1.65 \times 10^{-15} / 8.33 \times 10^{-16} = 1.98$$

Higher Q \Leftrightarrow Higher Tc