

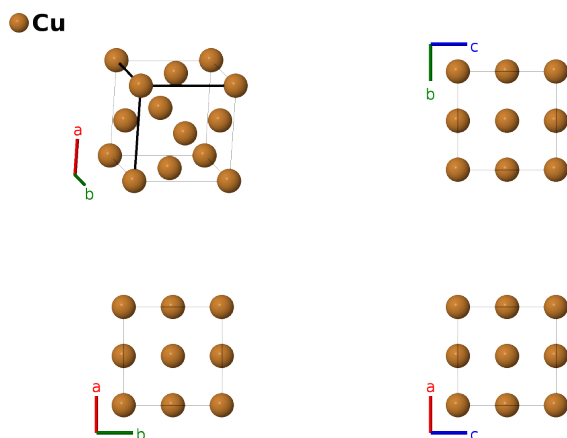
# Face-Centered Cubic (Cu, A1, fcc) Structure: A\_cF4\_225\_a-001

This structure originally had the label A\_cF4\_225\_a. Calls to that address will be redirected here.

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<https://aflow.org/p/6EYD>

[https://aflow.org/p/A\\_cF4\\_225\\_a-001](https://aflow.org/p/A_cF4_225_a-001)



Prototype	Cu
AFLOW prototype label	A_cF4_225_a-001
<i>Strukturbericht</i> designation	A1
ICSD	627114
Pearson symbol	cF4
Space group number	225
Space group symbol	$Fm\bar{3}m$
AFLOW prototype command	<code>aflow --proto=A_cF4_225_a-001 --params=a</code>

## Other compounds with this structure

Al, Ag, Au, Ce, Ir, Ni, Pb, Pd, Pt, Rh, Sr, Tb, Th

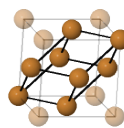
## Face-centered Cubic primitive vectors

$$\mathbf{a}_1 = \frac{1}{2}a\hat{y} + \frac{1}{2}a\hat{z}$$

$$\mathbf{a}_2 = \frac{1}{2}a\hat{x} + \frac{1}{2}a\hat{z}$$

$$\mathbf{a}_3 = \frac{1}{2}a\hat{x} + \frac{1}{2}a\hat{y}$$

$\mathbf{a}_2$   
 $\mathbf{a}_1$



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**Basis vectors**

	Lattice coordinates		Cartesian coordinates	Wyckoff position	Atom type
$\mathbf{B}_1$	0	=	0	(4a)	Cu I

**References**

- [1] M. E. Straumanis and L. S. Yu, *Lattice parameters, densities, expansion coefficients and perfection of structure of Cu and of Cu-In  $\alpha$  phase*, Acta Cryst. **25**, 676–682 (1969), doi:10.1107/S0567739469001549.