

Face-Centered Cubic (Cu, Al, fcc) Structure: A_cF4_225_a-001

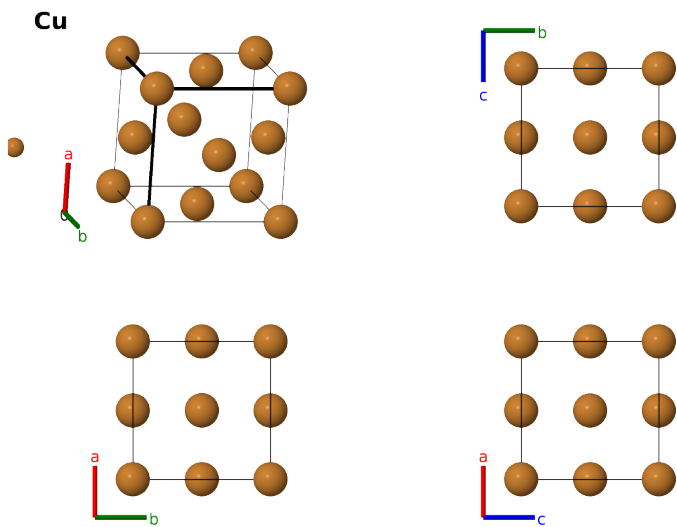
This structure previously used the label(s) **A.cF4.225.a**. Calls to these addresses will be redirected here.

Cite this page as:

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<https://aflow.org/prototype-encyclopedia/6EYD>

https://aflow.org/prototype-encyclopedia/A_cF4_225_a-001



Prototype	Cu
AFLOW prototype label	A_cF4_225_a-001
<i>Strukturbericht</i> designation	Al
ICSD	627114
CCDC	1752327
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</code> <code>--params=a</code>

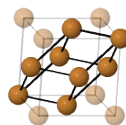
Other compounds with this structure

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

Face-centered Cubic primitive vectors

$$\begin{aligned}\mathbf{a}_1 &= \frac{1}{2}a\hat{\mathbf{y}} + \frac{1}{2}a\hat{\mathbf{z}} \\ \mathbf{a}_2 &= \frac{1}{2}a\hat{\mathbf{x}} + \frac{1}{2}a\hat{\mathbf{z}} \\ \mathbf{a}_3 &= \frac{1}{2}a\hat{\mathbf{x}} + \frac{1}{2}a\hat{\mathbf{y}}\end{aligned}$$

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



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 α phase*, Acta Cryst. **25**, 676–682 (1969), doi:10.1107/S0567739469001549.

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