fcc Fullerene (K_3C_{60}) Structure: A40B_cF492_225_j2l_ac-001

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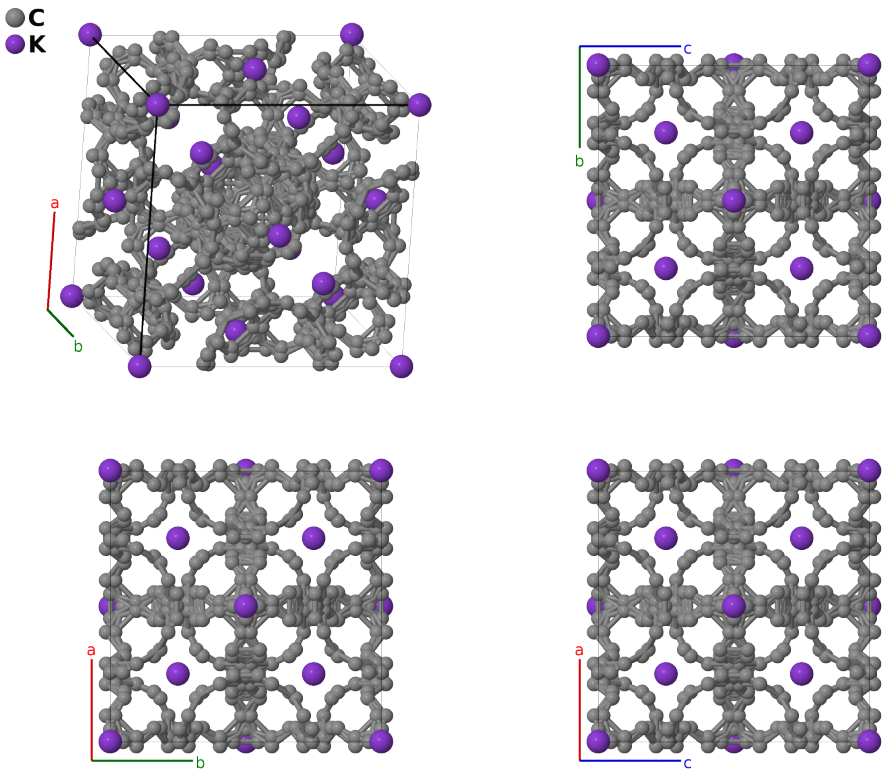
https://aflow.org/p/54ZJ

https://aflow.org/p/A40B_cF492_225_j2l_ac-001



Prototype	$C_{60}K_3$
AFLOW prototype label	A40B_cF492_225_j2l_ac-001
ICSD	66728
Pearson symbol	cF492
Space group number	225
Space group symbol	$Fm\bar{3}m$
AFLOW prototype command	`aflow --proto=A40B_cF492_225_j2l_ac-001 --params=`$a, y_3, z_3, x_4, y_4, z_4, x_5, y_5, z_5$

Other compounds with this structure

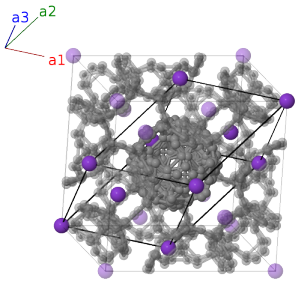
Cs_3C_{60}, CsK_2C_{60}, $CsNa_2C_{60}$, $CsRb_2C_{60}$, KNa_2C_{60}, Rb_3C_{60}, $RbCs_2C_{60}$, $RbNa_2C_{60}$

- All of the carbon sites are occupied only 50% of the time.

- (Stephens, 1991) put the K-I atom on the (4b) Wyckoff position, $(1/2, 1/2, 1/2)$. We shifted this so that the atom is at the origin, the (4a) Wyckoff site.

Face-centered Cubic primitive vectors

$$\begin{aligned}
\mathbf{a_1} &= \tfrac{1}{2}a\,\hat{\mathbf{y}} + \tfrac{1}{2}a\,\hat{\mathbf{z}} \\
\mathbf{a_2} &= \tfrac{1}{2}a\,\hat{\mathbf{x}} + \tfrac{1}{2}a\,\hat{\mathbf{z}} \\
\mathbf{a_3} &= \tfrac{1}{2}a\,\hat{\mathbf{x}} + \tfrac{1}{2}a\,\hat{\mathbf{y}}
\end{aligned}$$



Basis vectors

		Lattice coordinates		Cartesian coordinates	Wyckoff position	Atom type
$\mathbf{B_1}$	=	0	=	0	(4a)	K I
$\mathbf{B_2}$	=	$\frac{1}{4}\,\mathbf{a}_1 + \frac{1}{4}\,\mathbf{a}_2 + \frac{1}{4}\,\mathbf{a}_3$	=	$\frac{1}{4}a\,\hat{\mathbf{x}} + \frac{1}{4}a\,\hat{\mathbf{y}} + \frac{1}{4}a\,\hat{\mathbf{z}}$	(8c)	K II
$\mathbf{B_3}$	=	$\frac{3}{4}\,\mathbf{a}_1 + \frac{3}{4}\,\mathbf{a}_2 + \frac{3}{4}\,\mathbf{a}_3$	=	$\frac{3}{4}a\,\hat{\mathbf{x}} + \frac{3}{4}a\,\hat{\mathbf{y}} + \frac{3}{4}a\,\hat{\mathbf{z}}$	(8c)	K II
$\mathbf{B_4}$	=	$(y_3 + z_3)\,\mathbf{a}_1 - (y_3 - z_3)\,\mathbf{a}_2 + (y_3 - z_3)\,\mathbf{a}_3$	=	$ay_3\,\hat{\mathbf{y}} + az_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_5}$	=	$-(y_3 - z_3)\,\mathbf{a}_1 + (y_3 + z_3)\,\mathbf{a}_2 - (y_3 + z_3)\,\mathbf{a}_3$	=	$-ay_3\,\hat{\mathbf{y}} + az_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_6}$	=	$(y_3 - z_3)\,\mathbf{a}_1 - (y_3 + z_3)\,\mathbf{a}_2 + (y_3 + z_3)\,\mathbf{a}_3$	=	$ay_3\,\hat{\mathbf{y}} - az_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_7}$	=	$-(y_3 + z_3)\,\mathbf{a}_1 + (y_3 - z_3)\,\mathbf{a}_2 - (y_3 - z_3)\,\mathbf{a}_3$	=	$-ay_3\,\hat{\mathbf{y}} - az_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_8}$	=	$(y_3 - z_3)\,\mathbf{a}_1 + (y_3 + z_3)\,\mathbf{a}_2 - (y_3 - z_3)\,\mathbf{a}_3$	=	$az_3\,\hat{\mathbf{x}} + ay_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_9}$	=	$-(y_3 + z_3)\,\mathbf{a}_1 - (y_3 - z_3)\,\mathbf{a}_2 + (y_3 + z_3)\,\mathbf{a}_3$	=	$az_3\,\hat{\mathbf{x}} - ay_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_{10}}$	=	$(y_3 + z_3)\,\mathbf{a}_1 + (y_3 - z_3)\,\mathbf{a}_2 - (y_3 + z_3)\,\mathbf{a}_3$	=	$-az_3\,\hat{\mathbf{x}} + ay_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_{11}}$	=	$-(y_3 - z_3)\,\mathbf{a}_1 - (y_3 + z_3)\,\mathbf{a}_2 + (y_3 - z_3)\,\mathbf{a}_3$	=	$-az_3\,\hat{\mathbf{x}} - ay_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_{12}}$	=	$-(y_3 - z_3)\,\mathbf{a}_1 + (y_3 - z_3)\,\mathbf{a}_2 + (y_3 + z_3)\,\mathbf{a}_3$	=	$ay_3\,\hat{\mathbf{x}} + az_3\,\hat{\mathbf{y}}$	(96j)	C I
$\mathbf{B_{13}}$	=	$(y_3 + z_3)\,\mathbf{a}_1 - (y_3 + z_3)\,\mathbf{a}_2 - (y_3 - z_3)\,\mathbf{a}_3$	=	$-ay_3\,\hat{\mathbf{x}} + az_3\,\hat{\mathbf{y}}$	(96j)	C I
$\mathbf{B_{14}}$	=	$-(y_3 + z_3)\,\mathbf{a}_1 + (y_3 + z_3)\,\mathbf{a}_2 + (y_3 - z_3)\,\mathbf{a}_3$	=	$ay_3\,\hat{\mathbf{x}} - az_3\,\hat{\mathbf{y}}$	(96j)	C I
$\mathbf{B_{15}}$	=	$(y_3 - z_3)\,\mathbf{a}_1 - (y_3 - z_3)\,\mathbf{a}_2 - (y_3 + z_3)\,\mathbf{a}_3$	=	$-ay_3\,\hat{\mathbf{x}} - az_3\,\hat{\mathbf{y}}$	(96j)	C I
$\mathbf{B_{16}}$	=	$-(y_3 + z_3)\,\mathbf{a}_1 + (y_3 - z_3)\,\mathbf{a}_2 + (y_3 + z_3)\,\mathbf{a}_3$	=	$ay_3\,\hat{\mathbf{x}} - az_3\,\hat{\mathbf{z}}$	(96j)	C I

$\mathbf{B_{17}}$	=	$(y_3 - z_3)\ \mathbf{a}_1 - (y_3 + z_3)\ \mathbf{a}_2 - (y_3 - z_3)\ \mathbf{a}_3$	=	$-ay_3\,\hat{\mathbf{x}} - az_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_{18}}$	=	$-(y_3 - z_3)\ \mathbf{a}_1 + (y_3 + z_3)\ \mathbf{a}_2 + (y_3 - z_3)\ \mathbf{a}_3$	=	$ay_3\,\hat{\mathbf{x}} + az_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_{19}}$	=	$(y_3 + z_3)\ \mathbf{a}_1 - (y_3 - z_3)\ \mathbf{a}_2 - (y_3 + z_3)\ \mathbf{a}_3$	=	$-ay_3\,\hat{\mathbf{x}} + az_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_{20}}$	=	$-(y_3 - z_3)\ \mathbf{a}_1 - (y_3 + z_3)\ \mathbf{a}_2 + (y_3 + z_3)\ \mathbf{a}_3$	=	$az_3\,\hat{\mathbf{y}} - ay_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_{21}}$	=	$(y_3 + z_3)\ \mathbf{a}_1 + (y_3 - z_3)\ \mathbf{a}_2 - (y_3 - z_3)\ \mathbf{a}_3$	=	$az_3\,\hat{\mathbf{y}} + ay_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_{22}}$	=	$-(y_3 + z_3)\ \mathbf{a}_1 - (y_3 - z_3)\ \mathbf{a}_2 + (y_3 - z_3)\ \mathbf{a}_3$	=	$-az_3\,\hat{\mathbf{y}} - ay_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_{23}}$	=	$(y_3 - z_3)\ \mathbf{a}_1 + (y_3 + z_3)\ \mathbf{a}_2 - (y_3 + z_3)\ \mathbf{a}_3$	=	$-az_3\,\hat{\mathbf{y}} + ay_3\,\hat{\mathbf{z}}$	(96j)	C I
$\mathbf{B_{24}}$	=	$(y_3 - z_3)\ \mathbf{a}_1 - (y_3 - z_3)\ \mathbf{a}_2 + (y_3 + z_3)\ \mathbf{a}_3$	=	$az_3\,\hat{\mathbf{x}} + ay_3\,\hat{\mathbf{y}}$	(96j)	C I
$\mathbf{B_{25}}$	=	$-(y_3 + z_3)\ \mathbf{a}_1 + (y_3 + z_3)\ \mathbf{a}_2 - (y_3 - z_3)\ \mathbf{a}_3$	=	$az_3\,\hat{\mathbf{x}} - ay_3\,\hat{\mathbf{y}}$	(96j)	C I
$\mathbf{B_{26}}$	=	$(y_3 + z_3)\ \mathbf{a}_1 - (y_3 + z_3)\ \mathbf{a}_2 + (y_3 - z_3)\ \mathbf{a}_3$	=	$-az_3\,\hat{\mathbf{x}} + ay_3\,\hat{\mathbf{y}}$	(96j)	C I
$\mathbf{B_{27}}$	=	$-(y_3 - z_3)\ \mathbf{a}_1 + (y_3 - z_3)\ \mathbf{a}_2 - (y_3 + z_3)\ \mathbf{a}_3$	=	$-az_3\,\hat{\mathbf{x}} - ay_3\,\hat{\mathbf{y}}$	(96j)	C I
$\mathbf{B_{28}}$	=	$(-x_4 + y_4 + z_4)\ \mathbf{a}_1 + (x_4 - y_4 + z_4)\ \mathbf{a}_2 + (x_4 + y_4 - z_4)\ \mathbf{a}_3$	=	$ax_4\,\hat{\mathbf{x}} + ay_4\,\hat{\mathbf{y}} + az_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{29}}$	=	$(x_4 - y_4 + z_4)\ \mathbf{a}_1 + (-x_4 + y_4 + z_4)\ \mathbf{a}_2 - (x_4 + y_4 + z_4)\ \mathbf{a}_3$	=	$-ax_4\,\hat{\mathbf{x}} - ay_4\,\hat{\mathbf{y}} + az_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{30}}$	=	$(x_4 + y_4 - z_4)\ \mathbf{a}_1 - (x_4 + y_4 + z_4)\ \mathbf{a}_2 + (-x_4 + y_4 + z_4)\ \mathbf{a}_3$	=	$-ax_4\,\hat{\mathbf{x}} + ay_4\,\hat{\mathbf{y}} - az_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{31}}$	=	$-(x_4 + y_4 + z_4)\ \mathbf{a}_1 + (x_4 + y_4 - z_4)\ \mathbf{a}_2 + (x_4 - y_4 + z_4)\ \mathbf{a}_3$	=	$ax_4\,\hat{\mathbf{x}} - ay_4\,\hat{\mathbf{y}} - az_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{32}}$	=	$(x_4 + y_4 - z_4)\ \mathbf{a}_1 + (-x_4 + y_4 + z_4)\ \mathbf{a}_2 + (x_4 - y_4 + z_4)\ \mathbf{a}_3$	=	$az_4\,\hat{\mathbf{x}} + ax_4\,\hat{\mathbf{y}} + ay_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{33}}$	=	$-(x_4 + y_4 + z_4)\ \mathbf{a}_1 + (x_4 - y_4 + z_4)\ \mathbf{a}_2 + (-x_4 + y_4 + z_4)\ \mathbf{a}_3$	=	$az_4\,\hat{\mathbf{x}} - ax_4\,\hat{\mathbf{y}} - ay_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{34}}$	=	$(-x_4 + y_4 + z_4)\ \mathbf{a}_1 + (x_4 + y_4 - z_4)\ \mathbf{a}_2 - (x_4 + y_4 + z_4)\ \mathbf{a}_3$	=	$-az_4\,\hat{\mathbf{x}} - ax_4\,\hat{\mathbf{y}} + ay_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{35}}$	=	$(x_4 - y_4 + z_4)\ \mathbf{a}_1 - (x_4 + y_4 + z_4)\ \mathbf{a}_2 + (x_4 + y_4 - z_4)\ \mathbf{a}_3$	=	$-az_4\,\hat{\mathbf{x}} + ax_4\,\hat{\mathbf{y}} - ay_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{36}}$	=	$(x_4 - y_4 + z_4)\ \mathbf{a}_1 + (x_4 + y_4 - z_4)\ \mathbf{a}_2 + (-x_4 + y_4 + z_4)\ \mathbf{a}_3$	=	$ay_4\,\hat{\mathbf{x}} + az_4\,\hat{\mathbf{y}} + ax_4\,\hat{\mathbf{z}}$	(192l)	C II

$\mathbf{B_{37}}$	=	$(-x_4+y_4+z_4)\,\mathbf{a}_1-(x_4+y_4+z_4)\,\mathbf{a}_2+(x_4-y_4+z_4)\,\mathbf{a}_3$	=	$-ay_4\,\hat{\mathbf{x}}+az_4\,\hat{\mathbf{y}}-ax_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{38}}$	=	$-(x_4+y_4+z_4)\,\mathbf{a}_1+(-x_4+y_4+z_4)\,\mathbf{a}_2+(x_4+y_4-z_4)\,\mathbf{a}_3$	=	$ay_4\,\hat{\mathbf{x}}-az_4\,\hat{\mathbf{y}}-ax_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{39}}$	=	$(x_4+y_4-z_4)\,\mathbf{a}_1+(x_4-y_4+z_4)\,\mathbf{a}_2-(x_4+y_4+z_4)\,\mathbf{a}_3$	=	$-ay_4\,\hat{\mathbf{x}}-az_4\,\hat{\mathbf{y}}+ax_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{40}}$	=	$(x_4-y_4-z_4)\,\mathbf{a}_1-(x_4-y_4+z_4)\,\mathbf{a}_2+(x_4+y_4+z_4)\,\mathbf{a}_3$	=	$ay_4\,\hat{\mathbf{x}}+ax_4\,\hat{\mathbf{y}}-az_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{41}}$	=	$-(x_4-y_4+z_4)\,\mathbf{a}_1+(x_4-y_4-z_4)\,\mathbf{a}_2-(x_4+y_4-z_4)\,\mathbf{a}_3$	=	$-ay_4\,\hat{\mathbf{x}}-ax_4\,\hat{\mathbf{y}}-az_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{42}}$	=	$-(x_4+y_4-z_4)\,\mathbf{a}_1+(x_4+y_4+z_4)\,\mathbf{a}_2-(x_4-y_4+z_4)\,\mathbf{a}_3$	=	$ay_4\,\hat{\mathbf{x}}-ax_4\,\hat{\mathbf{y}}+az_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{43}}$	=	$(x_4+y_4+z_4)\,\mathbf{a}_1-(x_4+y_4-z_4)\,\mathbf{a}_2+(x_4-y_4-z_4)\,\mathbf{a}_3$	=	$-ay_4\,\hat{\mathbf{x}}+ax_4\,\hat{\mathbf{y}}+az_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{44}}$	=	$-(x_4+y_4-z_4)\,\mathbf{a}_1+(x_4-y_4-z_4)\,\mathbf{a}_2+(x_4+y_4+z_4)\,\mathbf{a}_3$	=	$ax_4\,\hat{\mathbf{x}}+az_4\,\hat{\mathbf{y}}-ay_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{45}}$	=	$(x_4+y_4+z_4)\,\mathbf{a}_1-(x_4-y_4+z_4)\,\mathbf{a}_2-(x_4+y_4-z_4)\,\mathbf{a}_3$	=	$-ax_4\,\hat{\mathbf{x}}+az_4\,\hat{\mathbf{y}}+ay_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{46}}$	=	$(x_4-y_4-z_4)\,\mathbf{a}_1-(x_4+y_4-z_4)\,\mathbf{a}_2-(x_4-y_4+z_4)\,\mathbf{a}_3$	=	$-ax_4\,\hat{\mathbf{x}}-az_4\,\hat{\mathbf{y}}-ay_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{47}}$	=	$-(x_4-y_4+z_4)\,\mathbf{a}_1+(x_4+y_4+z_4)\,\mathbf{a}_2+(x_4-y_4-z_4)\,\mathbf{a}_3$	=	$ax_4\,\hat{\mathbf{x}}-az_4\,\hat{\mathbf{y}}+ay_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{48}}$	=	$-(x_4-y_4+z_4)\,\mathbf{a}_1-(x_4+y_4-z_4)\,\mathbf{a}_2+(x_4+y_4+z_4)\,\mathbf{a}_3$	=	$az_4\,\hat{\mathbf{x}}+ay_4\,\hat{\mathbf{y}}-ax_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{49}}$	=	$(x_4-y_4-z_4)\,\mathbf{a}_1+(x_4+y_4+z_4)\,\mathbf{a}_2-(x_4+y_4-z_4)\,\mathbf{a}_3$	=	$az_4\,\hat{\mathbf{x}}-ay_4\,\hat{\mathbf{y}}+ax_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{50}}$	=	$(x_4+y_4+z_4)\,\mathbf{a}_1+(x_4-y_4-z_4)\,\mathbf{a}_2-(x_4-y_4+z_4)\,\mathbf{a}_3$	=	$-az_4\,\hat{\mathbf{x}}+ay_4\,\hat{\mathbf{y}}+ax_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{51}}$	=	$-(x_4+y_4-z_4)\,\mathbf{a}_1-(x_4-y_4+z_4)\,\mathbf{a}_2+(x_4-y_4-z_4)\,\mathbf{a}_3$	=	$-az_4\,\hat{\mathbf{x}}-ay_4\,\hat{\mathbf{y}}-ax_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{52}}$	=	$(x_4-y_4-z_4)\,\mathbf{a}_1-(x_4+y_4+z_4)\,\mathbf{a}_2-(x_4+y_4-z_4)\,\mathbf{a}_3$	=	$-ax_4\,\hat{\mathbf{x}}-ay_4\,\hat{\mathbf{y}}-az_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{53}}$	=	$-(x_4-y_4+z_4)\,\mathbf{a}_1+(x_4-y_4-z_4)\,\mathbf{a}_2+(x_4+y_4+z_4)\,\mathbf{a}_3$	=	$ax_4\,\hat{\mathbf{x}}+ay_4\,\hat{\mathbf{y}}-az_4\,\hat{\mathbf{z}}$	(192l)	C II

$$\mathbf{B_{54}} = -(x_4+y_4-z_4)\,\mathbf{a}_1+(x_4+y_4+z_4)\,\mathbf{a}_2+(x_4-y_4-z_4)\,\mathbf{a}_3 = ax_4\,\hat{\mathbf{x}}-ay_4\,\hat{\mathbf{y}}+az_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{55}} = (x_4+y_4+z_4)\,\mathbf{a}_1-(x_4+y_4-z_4)\,\mathbf{a}_2-(x_4-y_4+z_4)\,\mathbf{a}_3 = -ax_4\,\hat{\mathbf{x}}+ay_4\,\hat{\mathbf{y}}+az_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{56}} = -(x_4+y_4-z_4)\,\mathbf{a}_1+(x_4-y_4-z_4)\,\mathbf{a}_2-(x_4-y_4+z_4)\,\mathbf{a}_3 = -az_4\,\hat{\mathbf{x}}-ax_4\,\hat{\mathbf{y}}-ay_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{57}} = (x_4+y_4+z_4)\,\mathbf{a}_1-(x_4-y_4+z_4)\,\mathbf{a}_2+(x_4-y_4-z_4)\,\mathbf{a}_3 = -az_4\,\hat{\mathbf{x}}+ax_4\,\hat{\mathbf{y}}+ay_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{58}} = (x_4-y_4-z_4)\,\mathbf{a}_1-(x_4+y_4-z_4)\,\mathbf{a}_2+(x_4+y_4+z_4)\,\mathbf{a}_3 = az_4\,\hat{\mathbf{x}}+ax_4\,\hat{\mathbf{y}}-ay_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{59}} = -(x_4-y_4+z_4)\,\mathbf{a}_1+(x_4+y_4+z_4)\,\mathbf{a}_2-(x_4+y_4-z_4)\,\mathbf{a}_3 = az_4\,\hat{\mathbf{x}}-ax_4\,\hat{\mathbf{y}}+ay_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{60}} = -(x_4-y_4+z_4)\,\mathbf{a}_1-(x_4+y_4-z_4)\,\mathbf{a}_2+(x_4-y_4-z_4)\,\mathbf{a}_3 = -ay_4\,\hat{\mathbf{x}}-az_4\,\hat{\mathbf{y}}-ax_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{61}} = (x_4-y_4-z_4)\,\mathbf{a}_1+(x_4+y_4+z_4)\,\mathbf{a}_2-(x_4-y_4+z_4)\,\mathbf{a}_3 = ay_4\,\hat{\mathbf{x}}-az_4\,\hat{\mathbf{y}}+ax_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{62}} = (x_4+y_4+z_4)\,\mathbf{a}_1+(x_4-y_4-z_4)\,\mathbf{a}_2-(x_4+y_4-z_4)\,\mathbf{a}_3 = -ay_4\,\hat{\mathbf{x}}+az_4\,\hat{\mathbf{y}}+ax_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{63}} = -(x_4+y_4-z_4)\,\mathbf{a}_1-(x_4-y_4+z_4)\,\mathbf{a}_2+(x_4+y_4+z_4)\,\mathbf{a}_3 = ay_4\,\hat{\mathbf{x}}+az_4\,\hat{\mathbf{y}}-ax_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{64}} = (-x_4+y_4+z_4)\,\mathbf{a}_1+(x_4-y_4+z_4)\,\mathbf{a}_2-(x_4+y_4+z_4)\,\mathbf{a}_3 = -ay_4\,\hat{\mathbf{x}}-ax_4\,\hat{\mathbf{y}}+az_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{65}} = (x_4-y_4+z_4)\,\mathbf{a}_1+(-x_4+y_4+z_4)\,\mathbf{a}_2+(x_4+y_4-z_4)\,\mathbf{a}_3 = ay_4\,\hat{\mathbf{x}}+ax_4\,\hat{\mathbf{y}}+az_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{66}} = (x_4+y_4-z_4)\,\mathbf{a}_1-(x_4+y_4+z_4)\,\mathbf{a}_2+(x_4-y_4+z_4)\,\mathbf{a}_3 = -ay_4\,\hat{\mathbf{x}}+ax_4\,\hat{\mathbf{y}}-az_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{67}} = -(x_4+y_4+z_4)\,\mathbf{a}_1+(x_4+y_4-z_4)\,\mathbf{a}_2+(-x_4+y_4+z_4)\,\mathbf{a}_3 = ay_4\,\hat{\mathbf{x}}-ax_4\,\hat{\mathbf{y}}-az_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{68}} = (x_4+y_4-z_4)\,\mathbf{a}_1+(-x_4+y_4+z_4)\,\mathbf{a}_2-(x_4+y_4+z_4)\,\mathbf{a}_3 = -ax_4\,\hat{\mathbf{x}}-az_4\,\hat{\mathbf{y}}+ay_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{69}} = -(x_4+y_4+z_4)\,\mathbf{a}_1+(x_4-y_4+z_4)\,\mathbf{a}_2+(x_4+y_4-z_4)\,\mathbf{a}_3 = ax_4\,\hat{\mathbf{x}}-az_4\,\hat{\mathbf{y}}-ay_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$$\mathbf{B_{70}} = (-x_4+y_4+z_4)\,\mathbf{a}_1+(x_4+y_4-z_4)\,\mathbf{a}_2+(x_4-y_4+z_4)\,\mathbf{a}_3 = ax_4\,\hat{\mathbf{x}}+az_4\,\hat{\mathbf{y}}+ay_4\,\hat{\mathbf{z}} \quad (192l) \quad \text{C II}$$

$\mathbf{B_{71}}$	=	$(x_4 - y_4 + z_4)\ \mathbf{a}_1 -$ $(x_4 + y_4 + z_4)\ \mathbf{a}_2 +$ $(-x_4 + y_4 + z_4)\ \mathbf{a}_3$	=	$-ax_4\,\hat{\mathbf{x}} + az_4\,\hat{\mathbf{y}} - ay_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{72}}$	=	$(x_4 - y_4 + z_4)\ \mathbf{a}_1 +$ $(x_4 + y_4 - z_4)\ \mathbf{a}_2 -$ $(x_4 + y_4 + z_4)\ \mathbf{a}_3$	=	$-az_4\,\hat{\mathbf{x}} - ay_4\,\hat{\mathbf{y}} + ax_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{73}}$	=	$(-x_4 + y_4 + z_4)\ \mathbf{a}_1 -$ $(x_4 + y_4 + z_4)\ \mathbf{a}_2 +$ $(x_4 + y_4 - z_4)\ \mathbf{a}_3$	=	$-az_4\,\hat{\mathbf{x}} + ay_4\,\hat{\mathbf{y}} - ax_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{74}}$	=	$-(x_4 + y_4 + z_4)\ \mathbf{a}_1 +$ $(-x_4 + y_4 + z_4)\ \mathbf{a}_2 +$ $(x_4 - y_4 + z_4)\ \mathbf{a}_3$	=	$az_4\,\hat{\mathbf{x}} - ay_4\,\hat{\mathbf{y}} - ax_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{75}}$	=	$(x_4 + y_4 - z_4)\ \mathbf{a}_1 +$ $(x_4 - y_4 + z_4)\ \mathbf{a}_2 +$ $(-x_4 + y_4 + z_4)\ \mathbf{a}_3$	=	$az_4\,\hat{\mathbf{x}} + ay_4\,\hat{\mathbf{y}} + ax_4\,\hat{\mathbf{z}}$	(192l)	C II
$\mathbf{B_{76}}$	=	$(-x_5 + y_5 + z_5)\ \mathbf{a}_1 +$ $(x_5 - y_5 + z_5)\ \mathbf{a}_2 +$ $(x_5 + y_5 - z_5)\ \mathbf{a}_3$	=	$ax_5\,\hat{\mathbf{x}} + ay_5\,\hat{\mathbf{y}} + az_5\,\hat{\mathbf{z}}$	(192l)	C III
$\mathbf{B_{77}}$	=	$(x_5 - y_5 + z_5)\ \mathbf{a}_1 +$ $(-x_5 + y_5 + z_5)\ \mathbf{a}_2 -$ $(x_5 + y_5 + z_5)\ \mathbf{a}_3$	=	$-ax_5\,\hat{\mathbf{x}} - ay_5\,\hat{\mathbf{y}} + az_5\,\hat{\mathbf{z}}$	(192l)	C III
$\mathbf{B_{78}}$	=	$(x_5 + y_5 - z_5)\ \mathbf{a}_1 -$ $(x_5 + y_5 + z_5)\ \mathbf{a}_2 +$ $(-x_5 + y_5 + z_5)\ \mathbf{a}_3$	=	$-ax_5\,\hat{\mathbf{x}} + ay_5\,\hat{\mathbf{y}} - az_5\,\hat{\mathbf{z}}$	(192l)	C III
$\mathbf{B_{79}}$	=	$-(x_5 + y_5 + z_5)\ \mathbf{a}_1 +$ $(x_5 + y_5 - z_5)\ \mathbf{a}_2 +$ $(x_5 - y_5 + z_5)\ \mathbf{a}_3$	=	$ax_5\,\hat{\mathbf{x}} - ay_5\,\hat{\mathbf{y}} - az_5\,\hat{\mathbf{z}}$	(192l)	C III
$\mathbf{B_{80}}$	=	$(x_5 + y_5 - z_5)\ \mathbf{a}_1 +$ $(-x_5 + y_5 + z_5)\ \mathbf{a}_2 +$ $(x_5 - y_5 + z_5)\ \mathbf{a}_3$	=	$az_5\,\hat{\mathbf{x}} + ax_5\,\hat{\mathbf{y}} + ay_5\,\hat{\mathbf{z}}$	(192l)	C III
$\mathbf{B_{81}}$	=	$-(x_5 + y_5 + z_5)\ \mathbf{a}_1 +$ $(x_5 - y_5 + z_5)\ \mathbf{a}_2 +$ $(-x_5 + y_5 + z_5)\ \mathbf{a}_3$	=	$az_5\,\hat{\mathbf{x}} - ax_5\,\hat{\mathbf{y}} - ay_5\,\hat{\mathbf{z}}$	(192l)	C III
$\mathbf{B_{82}}$	=	$(-x_5 + y_5 + z_5)\ \mathbf{a}_1 +$ $(x_5 + y_5 - z_5)\ \mathbf{a}_2 -$ $(x_5 + y_5 + z_5)\ \mathbf{a}_3$	=	$-az_5\,\hat{\mathbf{x}} - ax_5\,\hat{\mathbf{y}} + ay_5\,\hat{\mathbf{z}}$	(192l)	C III
$\mathbf{B_{83}}$	=	$(x_5 - y_5 + z_5)\ \mathbf{a}_1 -$ $(x_5 + y_5 + z_5)\ \mathbf{a}_2 +$ $(x_5 + y_5 - z_5)\ \mathbf{a}_3$	=	$-az_5\,\hat{\mathbf{x}} + ax_5\,\hat{\mathbf{y}} - ay_5\,\hat{\mathbf{z}}$	(192l)	C III
$\mathbf{B_{84}}$	=	$(x_5 - y_5 + z_5)\ \mathbf{a}_1 +$ $(x_5 + y_5 - z_5)\ \mathbf{a}_2 +$ $(-x_5 + y_5 + z_5)\ \mathbf{a}_3$	=	$ay_5\,\hat{\mathbf{x}} + az_5\,\hat{\mathbf{y}} + ax_5\,\hat{\mathbf{z}}$	(192l)	C III
$\mathbf{B_{85}}$	=	$(-x_5 + y_5 + z_5)\ \mathbf{a}_1 -$ $(x_5 + y_5 + z_5)\ \mathbf{a}_2 +$ $(x_5 - y_5 + z_5)\ \mathbf{a}_3$	=	$-ay_5\,\hat{\mathbf{x}} + az_5\,\hat{\mathbf{y}} - ax_5\,\hat{\mathbf{z}}$	(192l)	C III
$\mathbf{B_{86}}$	=	$-(x_5 + y_5 + z_5)\ \mathbf{a}_1 +$ $(-x_5 + y_5 + z_5)\ \mathbf{a}_2 +$ $(x_5 + y_5 - z_5)\ \mathbf{a}_3$	=	$ay_5\,\hat{\mathbf{x}} - az_5\,\hat{\mathbf{y}} - ax_5\,\hat{\mathbf{z}}$	(192l)	C III
$\mathbf{B_{87}}$	=	$(x_5 + y_5 - z_5)\ \mathbf{a}_1 +$ $(x_5 - y_5 + z_5)\ \mathbf{a}_2 -$ $(x_5 + y_5 + z_5)\ \mathbf{a}_3$	=	$-ay_5\,\hat{\mathbf{x}} - az_5\,\hat{\mathbf{y}} + ax_5\,\hat{\mathbf{z}}$	(192l)	C III

$$\mathbf{B_{88}} = \begin{array}{c}(x_5 - y_5 - z_5)\,\mathbf{a}_1 - \\ (x_5 - y_5 + z_5)\,\mathbf{a}_2 + \\ (x_5 + y_5 + z_5)\,\mathbf{a}_3\end{array} = ay_5\,\hat{\mathbf{x}} + ax_5\,\hat{\mathbf{y}} - az_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{89}} = \begin{array}{c}-(x_5 - y_5 + z_5)\,\mathbf{a}_1 + \\ (x_5 - y_5 - z_5)\,\mathbf{a}_2 - \\ (x_5 + y_5 - z_5)\,\mathbf{a}_3\end{array} = -ay_5\,\hat{\mathbf{x}} - ax_5\,\hat{\mathbf{y}} - az_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{90}} = \begin{array}{c}-(x_5 + y_5 - z_5)\,\mathbf{a}_1 + \\ (x_5 + y_5 + z_5)\,\mathbf{a}_2 - \\ (x_5 - y_5 + z_5)\,\mathbf{a}_3\end{array} = ay_5\,\hat{\mathbf{x}} - ax_5\,\hat{\mathbf{y}} + az_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{91}} = \begin{array}{c}(x_5 + y_5 + z_5)\,\mathbf{a}_1 - \\ (x_5 + y_5 - z_5)\,\mathbf{a}_2 + \\ (x_5 - y_5 - z_5)\,\mathbf{a}_3\end{array} = -ay_5\,\hat{\mathbf{x}} + ax_5\,\hat{\mathbf{y}} + az_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{92}} = \begin{array}{c}-(x_5 + y_5 - z_5)\,\mathbf{a}_1 + \\ (x_5 - y_5 - z_5)\,\mathbf{a}_2 + \\ (x_5 + y_5 + z_5)\,\mathbf{a}_3\end{array} = ax_5\,\hat{\mathbf{x}} + az_5\,\hat{\mathbf{y}} - ay_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{93}} = \begin{array}{c}(x_5 + y_5 + z_5)\,\mathbf{a}_1 - \\ (x_5 - y_5 + z_5)\,\mathbf{a}_2 - \\ (x_5 + y_5 - z_5)\,\mathbf{a}_3\end{array} = -ax_5\,\hat{\mathbf{x}} + az_5\,\hat{\mathbf{y}} + ay_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{94}} = \begin{array}{c}(x_5 - y_5 - z_5)\,\mathbf{a}_1 - \\ (x_5 + y_5 - z_5)\,\mathbf{a}_2 - \\ (x_5 - y_5 + z_5)\,\mathbf{a}_3\end{array} = -ax_5\,\hat{\mathbf{x}} - az_5\,\hat{\mathbf{y}} - ay_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{95}} = \begin{array}{c}-(x_5 - y_5 + z_5)\,\mathbf{a}_1 + \\ (x_5 + y_5 + z_5)\,\mathbf{a}_2 + \\ (x_5 - y_5 - z_5)\,\mathbf{a}_3\end{array} = ax_5\,\hat{\mathbf{x}} - az_5\,\hat{\mathbf{y}} + ay_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{96}} = \begin{array}{c}-(x_5 - y_5 + z_5)\,\mathbf{a}_1 - \\ (x_5 + y_5 - z_5)\,\mathbf{a}_2 + \\ (x_5 + y_5 + z_5)\,\mathbf{a}_3\end{array} = az_5\,\hat{\mathbf{x}} + ay_5\,\hat{\mathbf{y}} - ax_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{97}} = \begin{array}{c}(x_5 - y_5 - z_5)\,\mathbf{a}_1 + \\ (x_5 + y_5 + z_5)\,\mathbf{a}_2 - \\ (x_5 + y_5 - z_5)\,\mathbf{a}_3\end{array} = az_5\,\hat{\mathbf{x}} - ay_5\,\hat{\mathbf{y}} + ax_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{98}} = \begin{array}{c}(x_5 + y_5 + z_5)\,\mathbf{a}_1 + \\ (x_5 - y_5 - z_5)\,\mathbf{a}_2 - \\ (x_5 - y_5 + z_5)\,\mathbf{a}_3\end{array} = -az_5\,\hat{\mathbf{x}} + ay_5\,\hat{\mathbf{y}} + ax_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{99}} = \begin{array}{c}-(x_5 + y_5 - z_5)\,\mathbf{a}_1 - \\ (x_5 - y_5 + z_5)\,\mathbf{a}_2 + \\ (x_5 - y_5 - z_5)\,\mathbf{a}_3\end{array} = -az_5\,\hat{\mathbf{x}} - ay_5\,\hat{\mathbf{y}} - ax_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{100}} = \begin{array}{c}(x_5 - y_5 - z_5)\,\mathbf{a}_1 - \\ (x_5 - y_5 + z_5)\,\mathbf{a}_2 - \\ (x_5 + y_5 - z_5)\,\mathbf{a}_3\end{array} = -ax_5\,\hat{\mathbf{x}} - ay_5\,\hat{\mathbf{y}} - az_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{101}} = \begin{array}{c}-(x_5 - y_5 + z_5)\,\mathbf{a}_1 + \\ (x_5 - y_5 - z_5)\,\mathbf{a}_2 + \\ (x_5 + y_5 + z_5)\,\mathbf{a}_3\end{array} = ax_5\,\hat{\mathbf{x}} + ay_5\,\hat{\mathbf{y}} - az_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{102}} = \begin{array}{c}-(x_5 + y_5 - z_5)\,\mathbf{a}_1 + \\ (x_5 + y_5 + z_5)\,\mathbf{a}_2 + \\ (x_5 - y_5 - z_5)\,\mathbf{a}_3\end{array} = ax_5\,\hat{\mathbf{x}} - ay_5\,\hat{\mathbf{y}} + az_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{103}} = \begin{array}{c}(x_5 + y_5 + z_5)\,\mathbf{a}_1 - \\ (x_5 + y_5 - z_5)\,\mathbf{a}_2 - \\ (x_5 - y_5 + z_5)\,\mathbf{a}_3\end{array} = -ax_5\,\hat{\mathbf{x}} + ay_5\,\hat{\mathbf{y}} + az_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$$\mathbf{B_{104}} = \begin{array}{c}-(x_5 + y_5 - z_5)\,\mathbf{a}_1 + \\ (x_5 - y_5 - z_5)\,\mathbf{a}_2 - \\ (x_5 - y_5 + z_5)\,\mathbf{a}_3\end{array} = -az_5\,\hat{\mathbf{x}} - ax_5\,\hat{\mathbf{y}} - ay_5\,\hat{\mathbf{z}} \quad (192l) \quad \text{C III}$$

$\mathbf{B_{105}} = (x_5 + y_5 + z_5)\,\mathbf{a}_1 - (x_5 - y_5 + z_5)\,\mathbf{a}_2 + (x_5 - y_5 - z_5)\,\mathbf{a}_3 = -az_5\,\hat{\mathbf{x}} + ax_5\,\hat{\mathbf{y}} + ay_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{106}} = (x_5 - y_5 - z_5)\,\mathbf{a}_1 - (x_5 + y_5 - z_5)\,\mathbf{a}_2 + (x_5 + y_5 + z_5)\,\mathbf{a}_3 = az_5\,\hat{\mathbf{x}} + ax_5\,\hat{\mathbf{y}} - ay_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{107}} = -(x_5 - y_5 + z_5)\,\mathbf{a}_1 + (x_5 + y_5 + z_5)\,\mathbf{a}_2 - (x_5 + y_5 - z_5)\,\mathbf{a}_3 = az_5\,\hat{\mathbf{x}} - ax_5\,\hat{\mathbf{y}} + ay_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{108}} = -(x_5 - y_5 + z_5)\,\mathbf{a}_1 - (x_5 + y_5 - z_5)\,\mathbf{a}_2 + (x_5 - y_5 - z_5)\,\mathbf{a}_3 = -ay_5\,\hat{\mathbf{x}} - az_5\,\hat{\mathbf{y}} - ax_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{109}} = (x_5 - y_5 - z_5)\,\mathbf{a}_1 + (x_5 + y_5 + z_5)\,\mathbf{a}_2 - (x_5 - y_5 + z_5)\,\mathbf{a}_3 = ay_5\,\hat{\mathbf{x}} - az_5\,\hat{\mathbf{y}} + ax_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{110}} = (x_5 + y_5 + z_5)\,\mathbf{a}_1 + (x_5 - y_5 - z_5)\,\mathbf{a}_2 - (x_5 + y_5 - z_5)\,\mathbf{a}_3 = -ay_5\,\hat{\mathbf{x}} + az_5\,\hat{\mathbf{y}} + ax_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{111}} = -(x_5 + y_5 - z_5)\,\mathbf{a}_1 - (x_5 - y_5 + z_5)\,\mathbf{a}_2 + (x_5 + y_5 + z_5)\,\mathbf{a}_3 = ay_5\,\hat{\mathbf{x}} + az_5\,\hat{\mathbf{y}} - ax_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{112}} = (-x_5 + y_5 + z_5)\,\mathbf{a}_1 + (x_5 - y_5 + z_5)\,\mathbf{a}_2 - (x_5 + y_5 + z_5)\,\mathbf{a}_3 = -ay_5\,\hat{\mathbf{x}} - ax_5\,\hat{\mathbf{y}} + az_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{113}} = (x_5 - y_5 + z_5)\,\mathbf{a}_1 + (-x_5 + y_5 + z_5)\,\mathbf{a}_2 + (x_5 + y_5 - z_5)\,\mathbf{a}_3 = ay_5\,\hat{\mathbf{x}} + ax_5\,\hat{\mathbf{y}} + az_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{114}} = (x_5 + y_5 - z_5)\,\mathbf{a}_1 - (x_5 + y_5 + z_5)\,\mathbf{a}_2 + (x_5 - y_5 + z_5)\,\mathbf{a}_3 = -ay_5\,\hat{\mathbf{x}} + ax_5\,\hat{\mathbf{y}} - az_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{115}} = -(x_5 + y_5 + z_5)\,\mathbf{a}_1 + (x_5 + y_5 - z_5)\,\mathbf{a}_2 + (-x_5 + y_5 + z_5)\,\mathbf{a}_3 = ay_5\,\hat{\mathbf{x}} - ax_5\,\hat{\mathbf{y}} - az_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{116}} = (x_5 + y_5 - z_5)\,\mathbf{a}_1 + (-x_5 + y_5 + z_5)\,\mathbf{a}_2 - (x_5 + y_5 + z_5)\,\mathbf{a}_3 = -ax_5\,\hat{\mathbf{x}} - az_5\,\hat{\mathbf{y}} + ay_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{117}} = -(x_5 + y_5 + z_5)\,\mathbf{a}_1 + (x_5 - y_5 + z_5)\,\mathbf{a}_2 + (x_5 + y_5 - z_5)\,\mathbf{a}_3 = ax_5\,\hat{\mathbf{x}} - az_5\,\hat{\mathbf{y}} - ay_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{118}} = (-x_5 + y_5 + z_5)\,\mathbf{a}_1 + (x_5 + y_5 - z_5)\,\mathbf{a}_2 + (x_5 - y_5 + z_5)\,\mathbf{a}_3 = ax_5\,\hat{\mathbf{x}} + az_5\,\hat{\mathbf{y}} + ay_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{119}} = (x_5 - y_5 + z_5)\,\mathbf{a}_1 - (x_5 + y_5 + z_5)\,\mathbf{a}_2 + (-x_5 + y_5 + z_5)\,\mathbf{a}_3 = -ax_5\,\hat{\mathbf{x}} + az_5\,\hat{\mathbf{y}} - ay_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{120}} = (x_5 - y_5 + z_5)\,\mathbf{a}_1 + (x_5 + y_5 - z_5)\,\mathbf{a}_2 - (x_5 + y_5 + z_5)\,\mathbf{a}_3 = -az_5\,\hat{\mathbf{x}} - ay_5\,\hat{\mathbf{y}} + ax_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{121}} = (-x_5 + y_5 + z_5)\,\mathbf{a}_1 - (x_5 + y_5 + z_5)\,\mathbf{a}_2 + (x_5 + y_5 - z_5)\,\mathbf{a}_3 = -az_5\,\hat{\mathbf{x}} + ay_5\,\hat{\mathbf{y}} - ax_5\,\hat{\mathbf{z}}$ (192l) C III

$\mathbf{B_{122}} =$	$-(x_5+y_5+z_5)\,\mathbf{a}_1 +$ $(-x_5+y_5+z_5)\,\mathbf{a}_2 +$ $(x_5-y_5+z_5)\,\mathbf{a}_3$	$=$	$az_5\,\hat{\mathbf{x}} - ay_5\,\hat{\mathbf{y}} - ax_5\,\hat{\mathbf{z}}$	(192l)	C III
$\mathbf{B_{123}} =$	$(x_5+y_5-z_5)\,\mathbf{a}_1 +$ $(x_5-y_5+z_5)\,\mathbf{a}_2 +$ $(-x_5+y_5+z_5)\,\mathbf{a}_3$	$=$	$az_5\,\hat{\mathbf{x}} + ay_5\,\hat{\mathbf{y}} + ax_5\,\hat{\mathbf{z}}$	(192l)	C III

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