

La₄₃Ni₁₇Mg₅ Structure:

A43B5C17_oC260_63_c8fg6h_cfg_ce3f2h-001

This structure previously used the label(s) **A43B5C17_oC260_63_c8fg6h_cfg_ce3f2h**. Calls to these addresses will be redirected here.

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- D. Hicks, M. J. Mehl, M. Esters, C. Oses, O. Levy, G. L. W. Hart, C. Toher, and S. Curtarolo, *The AFLOW Library of Crystallographic Prototypes: Part 3*, Comput. Mater. Sci. **199**, 110450 (2021), doi: 10.1016/j.commatsci.2021.110450.

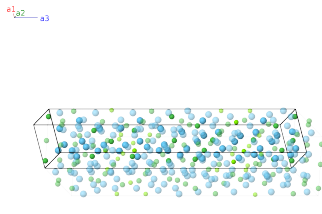
<https://aflow.org/prototype-encyclopedia/Z34R>

https://aflow.org/prototype-encyclopedia/A43B5C17_oC260_63_c8fg6h_cfg_ce3f2h-001

Prototype	La ₄₃ Mg ₅ Ni ₁₇
AFLOW prototype label	A43B5C17_oC260_63_c8fg6h_cfg_ce3f2h-001
ICSD	249963
CCDC	1716030
Pearson symbol	oC260
Space group number	63
Space group symbol	<i>Cmcm</i>
AFLOW prototype command	<pre>aflow --proto=A43B5C17_oC260_63_c8fg6h_cfg_ce3f2h-001 --params=a,b/a,c/a,y₁,y₂,y₃,x₄,y₅,z₅,y₆,z₆,y₇,z₇,y₈,z₈,y₉,z₉,y₁₀,z₁₀,y₁₁,z₁₁,y₁₂, z₁₂,y₁₃,z₁₃,y₁₄,z₁₄,y₁₅,z₁₅,y₁₆,z₁₆,x₁₇,y₁₇,x₁₈,y₁₈,x₁₉,y₁₉,z₁₉,x₂₀,y₂₀,z₂₀,x₂₁,y₂₁,z₂₁, x₂₂,y₂₂,z₂₂,x₂₃,y₂₃,z₂₃,x₂₄,y₂₄,z₂₄,x₂₅,y₂₅,z₂₅,x₂₆,y₂₆,z₂₆</pre>

Base-centered Orthorhombic primitive vectors

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



Basis vectors

	Lattice coordinates		Cartesian coordinates	Wyckoff position	Atom type
B₁	=	$-y_1 \mathbf{a}_1 + y_1 \mathbf{a}_2 + \frac{1}{4} \mathbf{a}_3$	=	$by_1 \hat{\mathbf{y}} + \frac{1}{4}c \hat{\mathbf{z}}$	(4c) La I
B₂	=	$y_1 \mathbf{a}_1 - y_1 \mathbf{a}_2 + \frac{3}{4} \mathbf{a}_3$	=	$-by_1 \hat{\mathbf{y}} + \frac{3}{4}c \hat{\mathbf{z}}$	(4c) La I

$\mathbf{B}_3$	$=$	$-y_2 \mathbf{a}_1 + y_2 \mathbf{a}_2 + \frac{1}{4} \mathbf{a}_3$	$=$	$by_2 \hat{\mathbf{y}} + \frac{1}{4} c \hat{\mathbf{z}}$	(4c)	Mg I
$\mathbf{B}_4$	$=$	$y_2 \mathbf{a}_1 - y_2 \mathbf{a}_2 + \frac{3}{4} \mathbf{a}_3$	$=$	$-by_2 \hat{\mathbf{y}} + \frac{3}{4} c \hat{\mathbf{z}}$	(4c)	Mg I
$\mathbf{B}_5$	$=$	$-y_3 \mathbf{a}_1 + y_3 \mathbf{a}_2 + \frac{1}{4} \mathbf{a}_3$	$=$	$by_3 \hat{\mathbf{y}} + \frac{1}{4} c \hat{\mathbf{z}}$	(4c)	Ni I
$\mathbf{B}_6$	$=$	$y_3 \mathbf{a}_1 - y_3 \mathbf{a}_2 + \frac{3}{4} \mathbf{a}_3$	$=$	$-by_3 \hat{\mathbf{y}} + \frac{3}{4} c \hat{\mathbf{z}}$	(4c)	Ni I
$\mathbf{B}_7$	$=$	$x_4 \mathbf{a}_1 + x_4 \mathbf{a}_2$	$=$	$ax_4 \hat{\mathbf{x}}$	(8e)	Ni II
$\mathbf{B}_8$	$=$	$-x_4 \mathbf{a}_1 - x_4 \mathbf{a}_2 + \frac{1}{2} \mathbf{a}_3$	$=$	$-ax_4 \hat{\mathbf{x}} + \frac{1}{2} c \hat{\mathbf{z}}$	(8e)	Ni II
$\mathbf{B}_9$	$=$	$-x_4 \mathbf{a}_1 - x_4 \mathbf{a}_2$	$=$	$-ax_4 \hat{\mathbf{x}}$	(8e)	Ni II
$\mathbf{B}_{10}$	$=$	$x_4 \mathbf{a}_1 + x_4 \mathbf{a}_2 + \frac{1}{2} \mathbf{a}_3$	$=$	$ax_4 \hat{\mathbf{x}} + \frac{1}{2} c \hat{\mathbf{z}}$	(8e)	Ni II
$\mathbf{B}_{11}$	$=$	$-y_5 \mathbf{a}_1 + y_5 \mathbf{a}_2 + z_5 \mathbf{a}_3$	$=$	$by_5 \hat{\mathbf{y}} + cz_5 \hat{\mathbf{z}}$	(8f)	La II
$\mathbf{B}_{12}$	$=$	$y_5 \mathbf{a}_1 - y_5 \mathbf{a}_2 + (z_5 + \frac{1}{2}) \mathbf{a}_3$	$=$	$-by_5 \hat{\mathbf{y}} + c(z_5 + \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La II
$\mathbf{B}_{13}$	$=$	$-y_5 \mathbf{a}_1 + y_5 \mathbf{a}_2 - (z_5 - \frac{1}{2}) \mathbf{a}_3$	$=$	$by_5 \hat{\mathbf{y}} - c(z_5 - \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La II
$\mathbf{B}_{14}$	$=$	$y_5 \mathbf{a}_1 - y_5 \mathbf{a}_2 - z_5 \mathbf{a}_3$	$=$	$-by_5 \hat{\mathbf{y}} - cz_5 \hat{\mathbf{z}}$	(8f)	La II
$\mathbf{B}_{15}$	$=$	$-y_6 \mathbf{a}_1 + y_6 \mathbf{a}_2 + z_6 \mathbf{a}_3$	$=$	$by_6 \hat{\mathbf{y}} + cz_6 \hat{\mathbf{z}}$	(8f)	La III
$\mathbf{B}_{16}$	$=$	$y_6 \mathbf{a}_1 - y_6 \mathbf{a}_2 + (z_6 + \frac{1}{2}) \mathbf{a}_3$	$=$	$-by_6 \hat{\mathbf{y}} + c(z_6 + \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La III
$\mathbf{B}_{17}$	$=$	$-y_6 \mathbf{a}_1 + y_6 \mathbf{a}_2 - (z_6 - \frac{1}{2}) \mathbf{a}_3$	$=$	$by_6 \hat{\mathbf{y}} - c(z_6 - \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La III
$\mathbf{B}_{18}$	$=$	$y_6 \mathbf{a}_1 - y_6 \mathbf{a}_2 - z_6 \mathbf{a}_3$	$=$	$-by_6 \hat{\mathbf{y}} - cz_6 \hat{\mathbf{z}}$	(8f)	La III
$\mathbf{B}_{19}$	$=$	$-y_7 \mathbf{a}_1 + y_7 \mathbf{a}_2 + z_7 \mathbf{a}_3$	$=$	$by_7 \hat{\mathbf{y}} + cz_7 \hat{\mathbf{z}}$	(8f)	La IV
$\mathbf{B}_{20}$	$=$	$y_7 \mathbf{a}_1 - y_7 \mathbf{a}_2 + (z_7 + \frac{1}{2}) \mathbf{a}_3$	$=$	$-by_7 \hat{\mathbf{y}} + c(z_7 + \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La IV
$\mathbf{B}_{21}$	$=$	$-y_7 \mathbf{a}_1 + y_7 \mathbf{a}_2 - (z_7 - \frac{1}{2}) \mathbf{a}_3$	$=$	$by_7 \hat{\mathbf{y}} - c(z_7 - \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La IV
$\mathbf{B}_{22}$	$=$	$y_7 \mathbf{a}_1 - y_7 \mathbf{a}_2 - z_7 \mathbf{a}_3$	$=$	$-by_7 \hat{\mathbf{y}} - cz_7 \hat{\mathbf{z}}$	(8f)	La IV
$\mathbf{B}_{23}$	$=$	$-y_8 \mathbf{a}_1 + y_8 \mathbf{a}_2 + z_8 \mathbf{a}_3$	$=$	$by_8 \hat{\mathbf{y}} + cz_8 \hat{\mathbf{z}}$	(8f)	La V
$\mathbf{B}_{24}$	$=$	$y_8 \mathbf{a}_1 - y_8 \mathbf{a}_2 + (z_8 + \frac{1}{2}) \mathbf{a}_3$	$=$	$-by_8 \hat{\mathbf{y}} + c(z_8 + \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La V
$\mathbf{B}_{25}$	$=$	$-y_8 \mathbf{a}_1 + y_8 \mathbf{a}_2 - (z_8 - \frac{1}{2}) \mathbf{a}_3$	$=$	$by_8 \hat{\mathbf{y}} - c(z_8 - \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La V
$\mathbf{B}_{26}$	$=$	$y_8 \mathbf{a}_1 - y_8 \mathbf{a}_2 - z_8 \mathbf{a}_3$	$=$	$-by_8 \hat{\mathbf{y}} - cz_8 \hat{\mathbf{z}}$	(8f)	La V
$\mathbf{B}_{27}$	$=$	$-y_9 \mathbf{a}_1 + y_9 \mathbf{a}_2 + z_9 \mathbf{a}_3$	$=$	$by_9 \hat{\mathbf{y}} + cz_9 \hat{\mathbf{z}}$	(8f)	La VI
$\mathbf{B}_{28}$	$=$	$y_9 \mathbf{a}_1 - y_9 \mathbf{a}_2 + (z_9 + \frac{1}{2}) \mathbf{a}_3$	$=$	$-by_9 \hat{\mathbf{y}} + c(z_9 + \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La VI
$\mathbf{B}_{29}$	$=$	$-y_9 \mathbf{a}_1 + y_9 \mathbf{a}_2 - (z_9 - \frac{1}{2}) \mathbf{a}_3$	$=$	$by_9 \hat{\mathbf{y}} - c(z_9 - \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La VI
$\mathbf{B}_{30}$	$=$	$y_9 \mathbf{a}_1 - y_9 \mathbf{a}_2 - z_9 \mathbf{a}_3$	$=$	$-by_9 \hat{\mathbf{y}} - cz_9 \hat{\mathbf{z}}$	(8f)	La VI
$\mathbf{B}_{31}$	$=$	$-y_{10} \mathbf{a}_1 + y_{10} \mathbf{a}_2 + z_{10} \mathbf{a}_3$	$=$	$by_{10} \hat{\mathbf{y}} + cz_{10} \hat{\mathbf{z}}$	(8f)	La VII
$\mathbf{B}_{32}$	$=$	$y_{10} \mathbf{a}_1 - y_{10} \mathbf{a}_2 + (z_{10} + \frac{1}{2}) \mathbf{a}_3$	$=$	$-by_{10} \hat{\mathbf{y}} + c(z_{10} + \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La VII
$\mathbf{B}_{33}$	$=$	$-y_{10} \mathbf{a}_1 + y_{10} \mathbf{a}_2 - (z_{10} - \frac{1}{2}) \mathbf{a}_3$	$=$	$by_{10} \hat{\mathbf{y}} - c(z_{10} - \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La VII
$\mathbf{B}_{34}$	$=$	$y_{10} \mathbf{a}_1 - y_{10} \mathbf{a}_2 - z_{10} \mathbf{a}_3$	$=$	$-by_{10} \hat{\mathbf{y}} - cz_{10} \hat{\mathbf{z}}$	(8f)	La VII
$\mathbf{B}_{35}$	$=$	$-y_{11} \mathbf{a}_1 + y_{11} \mathbf{a}_2 + z_{11} \mathbf{a}_3$	$=$	$by_{11} \hat{\mathbf{y}} + cz_{11} \hat{\mathbf{z}}$	(8f)	La VIII
$\mathbf{B}_{36}$	$=$	$y_{11} \mathbf{a}_1 - y_{11} \mathbf{a}_2 + (z_{11} + \frac{1}{2}) \mathbf{a}_3$	$=$	$-by_{11} \hat{\mathbf{y}} + c(z_{11} + \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La VIII
$\mathbf{B}_{37}$	$=$	$-y_{11} \mathbf{a}_1 + y_{11} \mathbf{a}_2 - (z_{11} - \frac{1}{2}) \mathbf{a}_3$	$=$	$by_{11} \hat{\mathbf{y}} - c(z_{11} - \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La VIII
$\mathbf{B}_{38}$	$=$	$y_{11} \mathbf{a}_1 - y_{11} \mathbf{a}_2 - z_{11} \mathbf{a}_3$	$=$	$-by_{11} \hat{\mathbf{y}} - cz_{11} \hat{\mathbf{z}}$	(8f)	La VIII
$\mathbf{B}_{39}$	$=$	$-y_{12} \mathbf{a}_1 + y_{12} \mathbf{a}_2 + z_{12} \mathbf{a}_3$	$=$	$by_{12} \hat{\mathbf{y}} + cz_{12} \hat{\mathbf{z}}$	(8f)	La IX
$\mathbf{B}_{40}$	$=$	$y_{12} \mathbf{a}_1 - y_{12} \mathbf{a}_2 + (z_{12} + \frac{1}{2}) \mathbf{a}_3$	$=$	$-by_{12} \hat{\mathbf{y}} + c(z_{12} + \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La IX
$\mathbf{B}_{41}$	$=$	$-y_{12} \mathbf{a}_1 + y_{12} \mathbf{a}_2 - (z_{12} - \frac{1}{2}) \mathbf{a}_3$	$=$	$by_{12} \hat{\mathbf{y}} - c(z_{12} - \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	La IX
$\mathbf{B}_{42}$	$=$	$y_{12} \mathbf{a}_1 - y_{12} \mathbf{a}_2 - z_{12} \mathbf{a}_3$	$=$	$-by_{12} \hat{\mathbf{y}} - cz_{12} \hat{\mathbf{z}}$	(8f)	La IX
$\mathbf{B}_{43}$	$=$	$-y_{13} \mathbf{a}_1 + y_{13} \mathbf{a}_2 + z_{13} \mathbf{a}_3$	$=$	$by_{13} \hat{\mathbf{y}} + cz_{13} \hat{\mathbf{z}}$	(8f)	Mg II

$\mathbf{B}_{44} =$	$y_{13} \mathbf{a}_1 - y_{13} \mathbf{a}_2 + (z_{13} + \frac{1}{2}) \mathbf{a}_3$	$=$	$-by_{13} \hat{\mathbf{y}} + c(z_{13} + \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	Mg II
$\mathbf{B}_{45} =$	$-y_{13} \mathbf{a}_1 + y_{13} \mathbf{a}_2 - (z_{13} - \frac{1}{2}) \mathbf{a}_3$	$=$	$by_{13} \hat{\mathbf{y}} - c(z_{13} - \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	Mg II
$\mathbf{B}_{46} =$	$y_{13} \mathbf{a}_1 - y_{13} \mathbf{a}_2 - z_{13} \mathbf{a}_3$	$=$	$-by_{13} \hat{\mathbf{y}} - cz_{13} \hat{\mathbf{z}}$	(8f)	Mg II
$\mathbf{B}_{47} =$	$-y_{14} \mathbf{a}_1 + y_{14} \mathbf{a}_2 + z_{14} \mathbf{a}_3$	$=$	$by_{14} \hat{\mathbf{y}} + cz_{14} \hat{\mathbf{z}}$	(8f)	Ni III
$\mathbf{B}_{48} =$	$y_{14} \mathbf{a}_1 - y_{14} \mathbf{a}_2 + (z_{14} + \frac{1}{2}) \mathbf{a}_3$	$=$	$-by_{14} \hat{\mathbf{y}} + c(z_{14} + \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	Ni III
$\mathbf{B}_{49} =$	$-y_{14} \mathbf{a}_1 + y_{14} \mathbf{a}_2 - (z_{14} - \frac{1}{2}) \mathbf{a}_3$	$=$	$by_{14} \hat{\mathbf{y}} - c(z_{14} - \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	Ni III
$\mathbf{B}_{50} =$	$y_{14} \mathbf{a}_1 - y_{14} \mathbf{a}_2 - z_{14} \mathbf{a}_3$	$=$	$-by_{14} \hat{\mathbf{y}} - cz_{14} \hat{\mathbf{z}}$	(8f)	Ni III
$\mathbf{B}_{51} =$	$-y_{15} \mathbf{a}_1 + y_{15} \mathbf{a}_2 + z_{15} \mathbf{a}_3$	$=$	$by_{15} \hat{\mathbf{y}} + cz_{15} \hat{\mathbf{z}}$	(8f)	Ni IV
$\mathbf{B}_{52} =$	$y_{15} \mathbf{a}_1 - y_{15} \mathbf{a}_2 + (z_{15} + \frac{1}{2}) \mathbf{a}_3$	$=$	$-by_{15} \hat{\mathbf{y}} + c(z_{15} + \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	Ni IV
$\mathbf{B}_{53} =$	$-y_{15} \mathbf{a}_1 + y_{15} \mathbf{a}_2 - (z_{15} - \frac{1}{2}) \mathbf{a}_3$	$=$	$by_{15} \hat{\mathbf{y}} - c(z_{15} - \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	Ni IV
$\mathbf{B}_{54} =$	$y_{15} \mathbf{a}_1 - y_{15} \mathbf{a}_2 - z_{15} \mathbf{a}_3$	$=$	$-by_{15} \hat{\mathbf{y}} - cz_{15} \hat{\mathbf{z}}$	(8f)	Ni IV
$\mathbf{B}_{55} =$	$-y_{16} \mathbf{a}_1 + y_{16} \mathbf{a}_2 + z_{16} \mathbf{a}_3$	$=$	$by_{16} \hat{\mathbf{y}} + cz_{16} \hat{\mathbf{z}}$	(8f)	Ni V
$\mathbf{B}_{56} =$	$y_{16} \mathbf{a}_1 - y_{16} \mathbf{a}_2 + (z_{16} + \frac{1}{2}) \mathbf{a}_3$	$=$	$-by_{16} \hat{\mathbf{y}} + c(z_{16} + \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	Ni V
$\mathbf{B}_{57} =$	$-y_{16} \mathbf{a}_1 + y_{16} \mathbf{a}_2 - (z_{16} - \frac{1}{2}) \mathbf{a}_3$	$=$	$by_{16} \hat{\mathbf{y}} - c(z_{16} - \frac{1}{2}) \hat{\mathbf{z}}$	(8f)	Ni V
$\mathbf{B}_{58} =$	$y_{16} \mathbf{a}_1 - y_{16} \mathbf{a}_2 - z_{16} \mathbf{a}_3$	$=$	$-by_{16} \hat{\mathbf{y}} - cz_{16} \hat{\mathbf{z}}$	(8f)	Ni V
$\mathbf{B}_{59} =$	$(x_{17} - y_{17}) \mathbf{a}_1 +$ $(x_{17} + y_{17}) \mathbf{a}_2 + \frac{1}{4} \mathbf{a}_3$	$=$	$ax_{17} \hat{\mathbf{x}} + by_{17} \hat{\mathbf{y}} + \frac{1}{4} c \hat{\mathbf{z}}$	(8g)	La X
$\mathbf{B}_{60} =$	$-(x_{17} - y_{17}) \mathbf{a}_1 -$ $(x_{17} + y_{17}) \mathbf{a}_2 + \frac{3}{4} \mathbf{a}_3$	$=$	$-ax_{17} \hat{\mathbf{x}} - by_{17} \hat{\mathbf{y}} + \frac{3}{4} c \hat{\mathbf{z}}$	(8g)	La X
$\mathbf{B}_{61} =$	$-(x_{17} + y_{17}) \mathbf{a}_1 -$ $(x_{17} - y_{17}) \mathbf{a}_2 + \frac{1}{4} \mathbf{a}_3$	$=$	$-ax_{17} \hat{\mathbf{x}} + by_{17} \hat{\mathbf{y}} + \frac{1}{4} c \hat{\mathbf{z}}$	(8g)	La X
$\mathbf{B}_{62} =$	$(x_{17} + y_{17}) \mathbf{a}_1 +$ $(x_{17} - y_{17}) \mathbf{a}_2 + \frac{3}{4} \mathbf{a}_3$	$=$	$ax_{17} \hat{\mathbf{x}} - by_{17} \hat{\mathbf{y}} + \frac{3}{4} c \hat{\mathbf{z}}$	(8g)	La X
$\mathbf{B}_{63} =$	$(x_{18} - y_{18}) \mathbf{a}_1 +$ $(x_{18} + y_{18}) \mathbf{a}_2 + \frac{1}{4} \mathbf{a}_3$	$=$	$ax_{18} \hat{\mathbf{x}} + by_{18} \hat{\mathbf{y}} + \frac{1}{4} c \hat{\mathbf{z}}$	(8g)	Mg III
$\mathbf{B}_{64} =$	$-(x_{18} - y_{18}) \mathbf{a}_1 -$ $(x_{18} + y_{18}) \mathbf{a}_2 + \frac{3}{4} \mathbf{a}_3$	$=$	$-ax_{18} \hat{\mathbf{x}} - by_{18} \hat{\mathbf{y}} + \frac{3}{4} c \hat{\mathbf{z}}$	(8g)	Mg III
$\mathbf{B}_{65} =$	$-(x_{18} + y_{18}) \mathbf{a}_1 -$ $(x_{18} - y_{18}) \mathbf{a}_2 + \frac{1}{4} \mathbf{a}_3$	$=$	$-ax_{18} \hat{\mathbf{x}} + by_{18} \hat{\mathbf{y}} + \frac{1}{4} c \hat{\mathbf{z}}$	(8g)	Mg III
$\mathbf{B}_{66} =$	$(x_{18} + y_{18}) \mathbf{a}_1 +$ $(x_{18} - y_{18}) \mathbf{a}_2 + \frac{3}{4} \mathbf{a}_3$	$=$	$ax_{18} \hat{\mathbf{x}} - by_{18} \hat{\mathbf{y}} + \frac{3}{4} c \hat{\mathbf{z}}$	(8g)	Mg III
$\mathbf{B}_{67} =$	$(x_{19} - y_{19}) \mathbf{a}_1 +$ $(x_{19} + y_{19}) \mathbf{a}_2 + z_{19} \mathbf{a}_3$	$=$	$ax_{19} \hat{\mathbf{x}} + by_{19} \hat{\mathbf{y}} + cz_{19} \hat{\mathbf{z}}$	(16h)	La XI
$\mathbf{B}_{68} =$	$-(x_{19} - y_{19}) \mathbf{a}_1 -$ $(x_{19} + y_{19}) \mathbf{a}_2 + (z_{19} + \frac{1}{2}) \mathbf{a}_3$	$=$	$-ax_{19} \hat{\mathbf{x}} - by_{19} \hat{\mathbf{y}} + c(z_{19} + \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XI
$\mathbf{B}_{69} =$	$-(x_{19} + y_{19}) \mathbf{a}_1 -$ $(x_{19} - y_{19}) \mathbf{a}_2 - (z_{19} - \frac{1}{2}) \mathbf{a}_3$	$=$	$-ax_{19} \hat{\mathbf{x}} + by_{19} \hat{\mathbf{y}} - c(z_{19} - \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XI
$\mathbf{B}_{70} =$	$(x_{19} + y_{19}) \mathbf{a}_1 +$ $(x_{19} - y_{19}) \mathbf{a}_2 - z_{19} \mathbf{a}_3$	$=$	$ax_{19} \hat{\mathbf{x}} - by_{19} \hat{\mathbf{y}} - cz_{19} \hat{\mathbf{z}}$	(16h)	La XI
$\mathbf{B}_{71} =$	$-(x_{19} - y_{19}) \mathbf{a}_1 -$ $(x_{19} + y_{19}) \mathbf{a}_2 - z_{19} \mathbf{a}_3$	$=$	$-ax_{19} \hat{\mathbf{x}} - by_{19} \hat{\mathbf{y}} - cz_{19} \hat{\mathbf{z}}$	(16h)	La XI
$\mathbf{B}_{72} =$	$(x_{19} - y_{19}) \mathbf{a}_1 +$ $(x_{19} + y_{19}) \mathbf{a}_2 - (z_{19} - \frac{1}{2}) \mathbf{a}_3$	$=$	$ax_{19} \hat{\mathbf{x}} + by_{19} \hat{\mathbf{y}} - c(z_{19} - \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XI
$\mathbf{B}_{73} =$	$(x_{19} + y_{19}) \mathbf{a}_1 +$ $(x_{19} - y_{19}) \mathbf{a}_2 + (z_{19} + \frac{1}{2}) \mathbf{a}_3$	$=$	$ax_{19} \hat{\mathbf{x}} - by_{19} \hat{\mathbf{y}} + c(z_{19} + \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XI

$\mathbf{B}_{74} =$	$-(x_{19} + y_{19}) \mathbf{a}_1 -$ $(x_{19} - y_{19}) \mathbf{a}_2 + z_{19} \mathbf{a}_3$	$=$	$-ax_{19} \hat{\mathbf{x}} + by_{19} \hat{\mathbf{y}} + cz_{19} \hat{\mathbf{z}}$	(16h)	La XI
$\mathbf{B}_{75} =$	$(x_{20} - y_{20}) \mathbf{a}_1 +$ $(x_{20} + y_{20}) \mathbf{a}_2 + z_{20} \mathbf{a}_3$	$=$	$ax_{20} \hat{\mathbf{x}} + by_{20} \hat{\mathbf{y}} + cz_{20} \hat{\mathbf{z}}$	(16h)	La XII
$\mathbf{B}_{76} =$	$-(x_{20} - y_{20}) \mathbf{a}_1 -$ $(x_{20} + y_{20}) \mathbf{a}_2 + (z_{20} + \frac{1}{2}) \mathbf{a}_3$	$=$	$-ax_{20} \hat{\mathbf{x}} - by_{20} \hat{\mathbf{y}} + c(z_{20} + \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XII
$\mathbf{B}_{77} =$	$-(x_{20} + y_{20}) \mathbf{a}_1 -$ $(x_{20} - y_{20}) \mathbf{a}_2 - (z_{20} - \frac{1}{2}) \mathbf{a}_3$	$=$	$-ax_{20} \hat{\mathbf{x}} + by_{20} \hat{\mathbf{y}} - c(z_{20} - \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XII
$\mathbf{B}_{78} =$	$(x_{20} + y_{20}) \mathbf{a}_1 +$ $(x_{20} - y_{20}) \mathbf{a}_2 - z_{20} \mathbf{a}_3$	$=$	$ax_{20} \hat{\mathbf{x}} - by_{20} \hat{\mathbf{y}} - cz_{20} \hat{\mathbf{z}}$	(16h)	La XII
$\mathbf{B}_{79} =$	$-(x_{20} - y_{20}) \mathbf{a}_1 -$ $(x_{20} + y_{20}) \mathbf{a}_2 - z_{20} \mathbf{a}_3$	$=$	$-ax_{20} \hat{\mathbf{x}} - by_{20} \hat{\mathbf{y}} - cz_{20} \hat{\mathbf{z}}$	(16h)	La XII
$\mathbf{B}_{80} =$	$(x_{20} - y_{20}) \mathbf{a}_1 +$ $(x_{20} + y_{20}) \mathbf{a}_2 - (z_{20} - \frac{1}{2}) \mathbf{a}_3$	$=$	$ax_{20} \hat{\mathbf{x}} + by_{20} \hat{\mathbf{y}} - c(z_{20} - \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XII
$\mathbf{B}_{81} =$	$(x_{20} + y_{20}) \mathbf{a}_1 +$ $(x_{20} - y_{20}) \mathbf{a}_2 + (z_{20} + \frac{1}{2}) \mathbf{a}_3$	$=$	$ax_{20} \hat{\mathbf{x}} - by_{20} \hat{\mathbf{y}} + c(z_{20} + \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XII
$\mathbf{B}_{82} =$	$-(x_{20} + y_{20}) \mathbf{a}_1 -$ $(x_{20} - y_{20}) \mathbf{a}_2 + z_{20} \mathbf{a}_3$	$=$	$-ax_{20} \hat{\mathbf{x}} + by_{20} \hat{\mathbf{y}} + cz_{20} \hat{\mathbf{z}}$	(16h)	La XII
$\mathbf{B}_{83} =$	$(x_{21} - y_{21}) \mathbf{a}_1 +$ $(x_{21} + y_{21}) \mathbf{a}_2 + z_{21} \mathbf{a}_3$	$=$	$ax_{21} \hat{\mathbf{x}} + by_{21} \hat{\mathbf{y}} + cz_{21} \hat{\mathbf{z}}$	(16h)	La XIII
$\mathbf{B}_{84} =$	$-(x_{21} - y_{21}) \mathbf{a}_1 -$ $(x_{21} + y_{21}) \mathbf{a}_2 + (z_{21} + \frac{1}{2}) \mathbf{a}_3$	$=$	$-ax_{21} \hat{\mathbf{x}} - by_{21} \hat{\mathbf{y}} + c(z_{21} + \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XIII
$\mathbf{B}_{85} =$	$-(x_{21} + y_{21}) \mathbf{a}_1 -$ $(x_{21} - y_{21}) \mathbf{a}_2 - (z_{21} - \frac{1}{2}) \mathbf{a}_3$	$=$	$-ax_{21} \hat{\mathbf{x}} + by_{21} \hat{\mathbf{y}} - c(z_{21} - \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XIII
$\mathbf{B}_{86} =$	$(x_{21} + y_{21}) \mathbf{a}_1 +$ $(x_{21} - y_{21}) \mathbf{a}_2 - z_{21} \mathbf{a}_3$	$=$	$ax_{21} \hat{\mathbf{x}} - by_{21} \hat{\mathbf{y}} - cz_{21} \hat{\mathbf{z}}$	(16h)	La XIII
$\mathbf{B}_{87} =$	$-(x_{21} - y_{21}) \mathbf{a}_1 -$ $(x_{21} + y_{21}) \mathbf{a}_2 - z_{21} \mathbf{a}_3$	$=$	$-ax_{21} \hat{\mathbf{x}} - by_{21} \hat{\mathbf{y}} - cz_{21} \hat{\mathbf{z}}$	(16h)	La XIII
$\mathbf{B}_{88} =$	$(x_{21} - y_{21}) \mathbf{a}_1 +$ $(x_{21} + y_{21}) \mathbf{a}_2 - (z_{21} - \frac{1}{2}) \mathbf{a}_3$	$=$	$ax_{21} \hat{\mathbf{x}} + by_{21} \hat{\mathbf{y}} - c(z_{21} - \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XIII
$\mathbf{B}_{89} =$	$(x_{21} + y_{21}) \mathbf{a}_1 +$ $(x_{21} - y_{21}) \mathbf{a}_2 + (z_{21} + \frac{1}{2}) \mathbf{a}_3$	$=$	$ax_{21} \hat{\mathbf{x}} - by_{21} \hat{\mathbf{y}} + c(z_{21} + \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XIII
$\mathbf{B}_{90} =$	$-(x_{21} + y_{21}) \mathbf{a}_1 -$ $(x_{21} - y_{21}) \mathbf{a}_2 + z_{21} \mathbf{a}_3$	$=$	$-ax_{21} \hat{\mathbf{x}} + by_{21} \hat{\mathbf{y}} + cz_{21} \hat{\mathbf{z}}$	(16h)	La XIII
$\mathbf{B}_{91} =$	$(x_{22} - y_{22}) \mathbf{a}_1 +$ $(x_{22} + y_{22}) \mathbf{a}_2 + z_{22} \mathbf{a}_3$	$=$	$ax_{22} \hat{\mathbf{x}} + by_{22} \hat{\mathbf{y}} + cz_{22} \hat{\mathbf{z}}$	(16h)	La XIV
$\mathbf{B}_{92} =$	$-(x_{22} - y_{22}) \mathbf{a}_1 -$ $(x_{22} + y_{22}) \mathbf{a}_2 + (z_{22} + \frac{1}{2}) \mathbf{a}_3$	$=$	$-ax_{22} \hat{\mathbf{x}} - by_{22} \hat{\mathbf{y}} + c(z_{22} + \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XIV
$\mathbf{B}_{93} =$	$-(x_{22} + y_{22}) \mathbf{a}_1 -$ $(x_{22} - y_{22}) \mathbf{a}_2 - (z_{22} - \frac{1}{2}) \mathbf{a}_3$	$=$	$-ax_{22} \hat{\mathbf{x}} + by_{22} \hat{\mathbf{y}} - c(z_{22} - \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XIV
$\mathbf{B}_{94} =$	$(x_{22} + y_{22}) \mathbf{a}_1 +$ $(x_{22} - y_{22}) \mathbf{a}_2 - z_{22} \mathbf{a}_3$	$=$	$ax_{22} \hat{\mathbf{x}} - by_{22} \hat{\mathbf{y}} - cz_{22} \hat{\mathbf{z}}$	(16h)	La XIV
$\mathbf{B}_{95} =$	$-(x_{22} - y_{22}) \mathbf{a}_1 -$ $(x_{22} + y_{22}) \mathbf{a}_2 - z_{22} \mathbf{a}_3$	$=$	$-ax_{22} \hat{\mathbf{x}} - by_{22} \hat{\mathbf{y}} - cz_{22} \hat{\mathbf{z}}$	(16h)	La XIV
$\mathbf{B}_{96} =$	$(x_{22} - y_{22}) \mathbf{a}_1 +$ $(x_{22} + y_{22}) \mathbf{a}_2 - (z_{22} - \frac{1}{2}) \mathbf{a}_3$	$=$	$ax_{22} \hat{\mathbf{x}} + by_{22} \hat{\mathbf{y}} - c(z_{22} - \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XIV
$\mathbf{B}_{97} =$	$(x_{22} + y_{22}) \mathbf{a}_1 +$ $(x_{22} - y_{22}) \mathbf{a}_2 + (z_{22} + \frac{1}{2}) \mathbf{a}_3$	$=$	$ax_{22} \hat{\mathbf{x}} - by_{22} \hat{\mathbf{y}} + c(z_{22} + \frac{1}{2}) \hat{\mathbf{z}}$	(16h)	La XIV

$\mathbf{B}_{98} =$	$-(x_{22} + y_{22}) \mathbf{a}_1 -$ $(x_{22} - y_{22}) \mathbf{a}_2 + z_{22} \mathbf{a}_3$	$=$	$-ax_{22} \hat{\mathbf{x}} + by_{22} \hat{\mathbf{y}} + cz_{22} \hat{\mathbf{z}}$	$(16h)$	La XIV
$\mathbf{B}_{99} =$	$(x_{23} - y_{23}) \mathbf{a}_1 +$ $(x_{23} + y_{23}) \mathbf{a}_2 + z_{23} \mathbf{a}_3$	$=$	$ax_{23} \hat{\mathbf{x}} + by_{23} \hat{\mathbf{y}} + cz_{23} \hat{\mathbf{z}}$	$(16h)$	La XV
$\mathbf{B}_{100} =$	$-(x_{23} - y_{23}) \mathbf{a}_1 -$ $(x_{23} + y_{23}) \mathbf{a}_2 + (z_{23} + \frac{1}{2}) \mathbf{a}_3$	$=$	$-ax_{23} \hat{\mathbf{x}} - by_{23} \hat{\mathbf{y}} + c(z_{23} + \frac{1}{2}) \hat{\mathbf{z}}$	$(16h)$	La XV
$\mathbf{B}_{101} =$	$-(x_{23} + y_{23}) \mathbf{a}_1 -$ $(x_{23} - y_{23}) \mathbf{a}_2 - (z_{23} - \frac{1}{2}) \mathbf{a}_3$	$=$	$-ax_{23} \hat{\mathbf{x}} + by_{23} \hat{\mathbf{y}} - c(z_{23} - \frac{1}{2}) \hat{\mathbf{z}}$	$(16h)$	La XV
$\mathbf{B}_{102} =$	$(x_{23} + y_{23}) \mathbf{a}_1 +$ $(x_{23} - y_{23}) \mathbf{a}_2 - z_{23} \mathbf{a}_3$	$=$	$ax_{23} \hat{\mathbf{x}} - by_{23} \hat{\mathbf{y}} - cz_{23} \hat{\mathbf{z}}$	$(16h)$	La XV
$\mathbf{B}_{103} =$	$-(x_{23} - y_{23}) \mathbf{a}_1 -$ $(x_{23} + y_{23}) \mathbf{a}_2 - z_{23} \mathbf{a}_3$	$=$	$-ax_{23} \hat{\mathbf{x}} - by_{23} \hat{\mathbf{y}} - cz_{23} \hat{\mathbf{z}}$	$(16h)$	La XV
$\mathbf{B}_{104} =$	$(x_{23} - y_{23}) \mathbf{a}_1 +$ $(x_{23} + y_{23}) \mathbf{a}_2 - (z_{23} - \frac{1}{2}) \mathbf{a}_3$	$=$	$ax_{23} \hat{\mathbf{x}} + by_{23} \hat{\mathbf{y}} - c(z_{23} - \frac{1}{2}) \hat{\mathbf{z}}$	$(16h)$	La XV
$\mathbf{B}_{105} =$	$(x_{23} + y_{23}) \mathbf{a}_1 +$ $(x_{23} - y_{23}) \mathbf{a}_2 + (z_{23} + \frac{1}{2}) \mathbf{a}_3$	$=$	$ax_{23} \hat{\mathbf{x}} - by_{23} \hat{\mathbf{y}} + c(z_{23} + \frac{1}{2}) \hat{\mathbf{z}}$	$(16h)$	La XV
$\mathbf{B}_{106} =$	$-(x_{23} + y_{23}) \mathbf{a}_1 -$ $(x_{23} - y_{23}) \mathbf{a}_2 + z_{23} \mathbf{a}_3$	$=$	$-ax_{23} \hat{\mathbf{x}} + by_{23} \hat{\mathbf{y}} + cz_{23} \hat{\mathbf{z}}$	$(16h)$	La XV
$\mathbf{B}_{107} =$	$(x_{24} - y_{24}) \mathbf{a}_1 +$ $(x_{24} + y_{24}) \mathbf{a}_2 + z_{24} \mathbf{a}_3$	$=$	$ax_{24} \hat{\mathbf{x}} + by_{24} \hat{\mathbf{y}} + cz_{24} \hat{\mathbf{z}}$	$(16h)$	La XVI
$\mathbf{B}_{108} =$	$-(x_{24} - y_{24}) \mathbf{a}_1 -$ $(x_{24} + y_{24}) \mathbf{a}_2 + (z_{24} + \frac{1}{2}) \mathbf{a}_3$	$=$	$-ax_{24} \hat{\mathbf{x}} - by_{24} \hat{\mathbf{y}} + c(z_{24} + \frac{1}{2}) \hat{\mathbf{z}}$	$(16h)$	La XVI
$\mathbf{B}_{109} =$	$-(x_{24} + y_{24}) \mathbf{a}_1 -$ $(x_{24} - y_{24}) \mathbf{a}_2 - (z_{24} - \frac{1}{2}) \mathbf{a}_3$	$=$	$-ax_{24} \hat{\mathbf{x}} + by_{24} \hat{\mathbf{y}} - c(z_{24} - \frac{1}{2}) \hat{\mathbf{z}}$	$(16h)$	La XVI
$\mathbf{B}_{110} =$	$(x_{24} + y_{24}) \mathbf{a}_1 +$ $(x_{24} - y_{24}) \mathbf{a}_2 - z_{24} \mathbf{a}_3$	$=$	$ax_{24} \hat{\mathbf{x}} - by_{24} \hat{\mathbf{y}} - cz_{24} \hat{\mathbf{z}}$	$(16h)$	La XVI
$\mathbf{B}_{111} =$	$-(x_{24} - y_{24}) \mathbf{a}_1 -$ $(x_{24} + y_{24}) \mathbf{a}_2 - z_{24} \mathbf{a}_3$	$=$	$-ax_{24} \hat{\mathbf{x}} - by_{24} \hat{\mathbf{y}} - cz_{24} \hat{\mathbf{z}}$	$(16h)$	La XVI
$\mathbf{B}_{112} =$	$(x_{24} - y_{24}) \mathbf{a}_1 +$ $(x_{24} + y_{24}) \mathbf{a}_2 - (z_{24} - \frac{1}{2}) \mathbf{a}_3$	$=$	$ax_{24} \hat{\mathbf{x}} + by_{24} \hat{\mathbf{y}} - c(z_{24} - \frac{1}{2}) \hat{\mathbf{z}}$	$(16h)$	La XVI
$\mathbf{B}_{113} =$	$(x_{24} + y_{24}) \mathbf{a}_1 +$ $(x_{24} - y_{24}) \mathbf{a}_2 + (z_{24} + \frac{1}{2}) \mathbf{a}_3$	$=$	$ax_{24} \hat{\mathbf{x}} - by_{24} \hat{\mathbf{y}} + c(z_{24} + \frac{1}{2}) \hat{\mathbf{z}}$	$(16h)$	La XVI
$\mathbf{B}_{114} =$	$-(x_{24} + y_{24}) \mathbf{a}_1 -$ $(x_{24} - y_{24}) \mathbf{a}_2 + z_{24} \mathbf{a}_3$	$=$	$-ax_{24} \hat{\mathbf{x}} + by_{24} \hat{\mathbf{y}} + cz_{24} \hat{\mathbf{z}}$	$(16h)$	La XVI
$\mathbf{B}_{115} =$	$(x_{25} - y_{25}) \mathbf{a}_1 +$ $(x_{25} + y_{25}) \mathbf{a}_2 + z_{25} \mathbf{a}_3$	$=$	$ax_{25} \hat{\mathbf{x}} + by_{25} \hat{\mathbf{y}} + cz_{25} \hat{\mathbf{z}}$	$(16h)$	Ni VI
$\mathbf{B}_{116} =$	$-(x_{25} - y_{25}) \mathbf{a}_1 -$ $(x_{25} + y_{25}) \mathbf{a}_2 + (z_{25} + \frac{1}{2}) \mathbf{a}_3$	$=$	$-ax_{25} \hat{\mathbf{x}} - by_{25} \hat{\mathbf{y}} + c(z_{25} + \frac{1}{2}) \hat{\mathbf{z}}$	$(16h)$	Ni VI
$\mathbf{B}_{117} =$	$-(x_{25} + y_{25}) \mathbf{a}_1 -$ $(x_{25} - y_{25}) \mathbf{a}_2 - (z_{25} - \frac{1}{2}) \mathbf{a}_3$	$=$	$-ax_{25} \hat{\mathbf{x}} + by_{25} \hat{\mathbf{y}} - c(z_{25} - \frac{1}{2}) \hat{\mathbf{z}}$	$(16h)$	Ni VI
$\mathbf{B}_{118} =$	$(x_{25} + y_{25}) \mathbf{a}_1 +$ $(x_{25} - y_{25}) \mathbf{a}_2 - z_{25} \mathbf{a}_3$	$=$	$ax_{25} \hat{\mathbf{x}} - by_{25} \hat{\mathbf{y}} - cz_{25} \hat{\mathbf{z}}$	$(16h)$	Ni VI
$\mathbf{B}_{119} =$	$-(x_{25} - y_{25}) \mathbf{a}_1 -$ $(x_{25} + y_{25}) \mathbf{a}_2 - z_{25} \mathbf{a}_3$	$=$	$-ax_{25} \hat{\mathbf{x}} - by_{25} \hat{\mathbf{y}} - cz_{25} \hat{\mathbf{z}}$	$(16h)$	Ni VI
$\mathbf{B}_{120} =$	$(x_{25} - y_{25}) \mathbf{a}_1 +$ $(x_{25} + y_{25}) \mathbf{a}_2 -$				

$$\begin{aligned}
\mathbf{B}_{122} &= \begin{matrix} -(x_{25} + y_{25}) \mathbf{a}_1 - \\ (x_{25} - y_{25}) \mathbf{a}_2 + z_{25} \mathbf{a}_3 \end{matrix} &= & -ax_{25} \hat{\mathbf{x}} + by_{25} \hat{\mathbf{y}} + cz_{25} \hat{\mathbf{z}} & (16h) & \text{Ni VI} \\
\mathbf{B}_{123} &= \begin{matrix} (x_{26} - y_{26}) \mathbf{a}_1 + \\ (x_{26} + y_{26}) \mathbf{a}_2 + z_{26} \mathbf{a}_3 \end{matrix} &= & ax_{26} \hat{\mathbf{x}} + by_{26} \hat{\mathbf{y}} + cz_{26} \hat{\mathbf{z}} & (16h) & \text{Ni VII} \\
\mathbf{B}_{124} &= \begin{matrix} -(x_{26} - y_{26}) \mathbf{a}_1 - \\ (x_{26} + y_{26}) \mathbf{a}_2 + (z_{26} + \frac{1}{2}) \mathbf{a}_3 \end{matrix} &= & -ax_{26} \hat{\mathbf{x}} - by_{26} \hat{\mathbf{y}} + c(z_{26} + \frac{1}{2}) \hat{\mathbf{z}} & (16h) & \text{Ni VII} \\
\mathbf{B}_{125} &= \begin{matrix} -(x_{26} + y_{26}) \mathbf{a}_1 - \\ (x_{26} - y_{26}) \mathbf{a}_2 - (z_{26} - \frac{1}{2}) \mathbf{a}_3 \end{matrix} &= & -ax_{26} \hat{\mathbf{x}} + by_{26} \hat{\mathbf{y}} - c(z_{26} - \frac{1}{2}) \hat{\mathbf{z}} & (16h) & \text{Ni VII} \\
\mathbf{B}_{126} &= \begin{matrix} (x_{26} + y_{26}) \mathbf{a}_1 + \\ (x_{26} - y_{26}) \mathbf{a}_2 - z_{26} \mathbf{a}_3 \end{matrix} &= & ax_{26} \hat{\mathbf{x}} - by_{26} \hat{\mathbf{y}} - cz_{26} \hat{\mathbf{z}} & (16h) & \text{Ni VII} \\
\mathbf{B}_{127} &= \begin{matrix} -(x_{26} - y_{26}) \mathbf{a}_1 - \\ (x_{26} + y_{26}) \mathbf{a}_2 - z_{26} \mathbf{a}_3 \end{matrix} &= & -ax_{26} \hat{\mathbf{x}} - by_{26} \hat{\mathbf{y}} - cz_{26} \hat{\mathbf{z}} & (16h) & \text{Ni VII} \\
\mathbf{B}_{128} &= \begin{matrix} (x_{26} - y_{26}) \mathbf{a}_1 + \\ (x_{26} + y_{26}) \mathbf{a}_2 - (z_{26} - \frac{1}{2}) \mathbf{a}_3 \end{matrix} &= & ax_{26} \hat{\mathbf{x}} + by_{26} \hat{\mathbf{y}} - c(z_{26} - \frac{1}{2}) \hat{\mathbf{z}} & (16h) & \text{Ni VII} \\
\mathbf{B}_{129} &= \begin{matrix} (x_{26} + y_{26}) \mathbf{a}_1 + \\ (x_{26} - y_{26}) \mathbf{a}_2 + (z_{26} + \frac{1}{2}) \mathbf{a}_3 \end{matrix} &= & ax_{26} \hat{\mathbf{x}} - by_{26} \hat{\mathbf{y}} + c(z_{26} + \frac{1}{2}) \hat{\mathbf{z}} & (16h) & \text{Ni VII} \\
\mathbf{B}_{130} &= \begin{matrix} -(x_{26} + y_{26}) \mathbf{a}_1 - \\ (x_{26} - y_{26}) \mathbf{a}_2 + z_{26} \mathbf{a}_3 \end{matrix} &= & -ax_{26} \hat{\mathbf{x}} + by_{26} \hat{\mathbf{y}} + cz_{26} \hat{\mathbf{z}} & (16h) & \text{Ni VII}
\end{aligned}$$

References

- [1] P. Solokha, S. D. Negri, V. Pavlyuk, and A. Saccone, *Anti-Mackay Polyicosahedral Clusters in La-Ni-Mg Ternary Compounds: Synthesis and Crystal Structure of the $\text{La}_{43}\text{Ni}_{17}\text{Mg}_5$ New Intermetallic Phase*, Inorg. Chem. **48**, 11586–11593 (2009), doi:10.1021/ic901422v.

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D. Hicks, M. J. Mehl, E. Gossett, C. Toher, O. Levy, R. M. Hanson, G. Hart, and S. Curtarolo, *The AFLOW Library of Crystallographic Prototypes: Part 2*, Comput. Mater. Sci. **161**, S1 (2019). doi: 10.1016/j.commatsci.2018.10.043

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