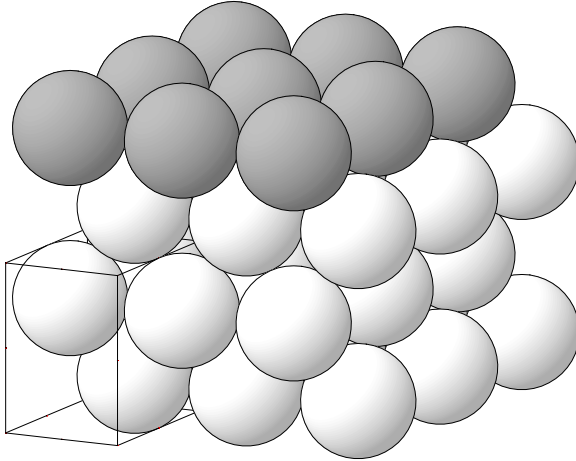


Mg

*hP2*(194)  $P6_3/mmc - c$ **Mg** [2], h.c.p. (hexagonal close-packed), Strukturbericht notation A3; Zn [3]

Structural features: Close-packed layers in h stacking, i.e. consecutive layers are shifted in opposite directions. See Fig. III.1.

Fig. III.1. **Mg**

Arrangement of Mg atoms emphasizing a close-packed layer perpendicular to [001].

Predel B., Hülse K. (1978) [1]

Mg

 $a = 0.32092$ ,  $c = 0.52121$  nm,  $c/a = 1.624$ ,  $V = 0.0465$  nm<sup>3</sup>,  $Z = 2$ 

site	Wyck.	sym.	$x$	$y$	$z$	occ.	atomic environment
Mg1	2c	-6m2	$1/3$	$2/3$	$1/4$		anticoctahedron Mg <sub>12</sub>

Experimental: powder, film, X-rays

Remarks: Zn with  $c/a = 1.86$  and lower coordination number (6+6) is sometimes considered as a branch.

References: [1] Predel B., Hülse K. (1978), Z. Metallkd. 69, 690-696. [2] (1931), Strukturberichte 1, 16,40. [3] (1931), Strukturberichte 1, 16,41.