

Figure 2.24 Miller indices in the hexagonal crystal system. (a) Hexagonal crystal with a , b , and c crystal axes. (b) Relation of light-shaded face to the unit cell. Based on unit cell intercepts, the Miller index is (100). (c) Relation of the dark-shaded face to a unit cell. Based on unit cell intercepts, the Miller index is (1 $\bar{1}$ 0). (d) View down the c axis with the Miller indices for all vertical faces shown.

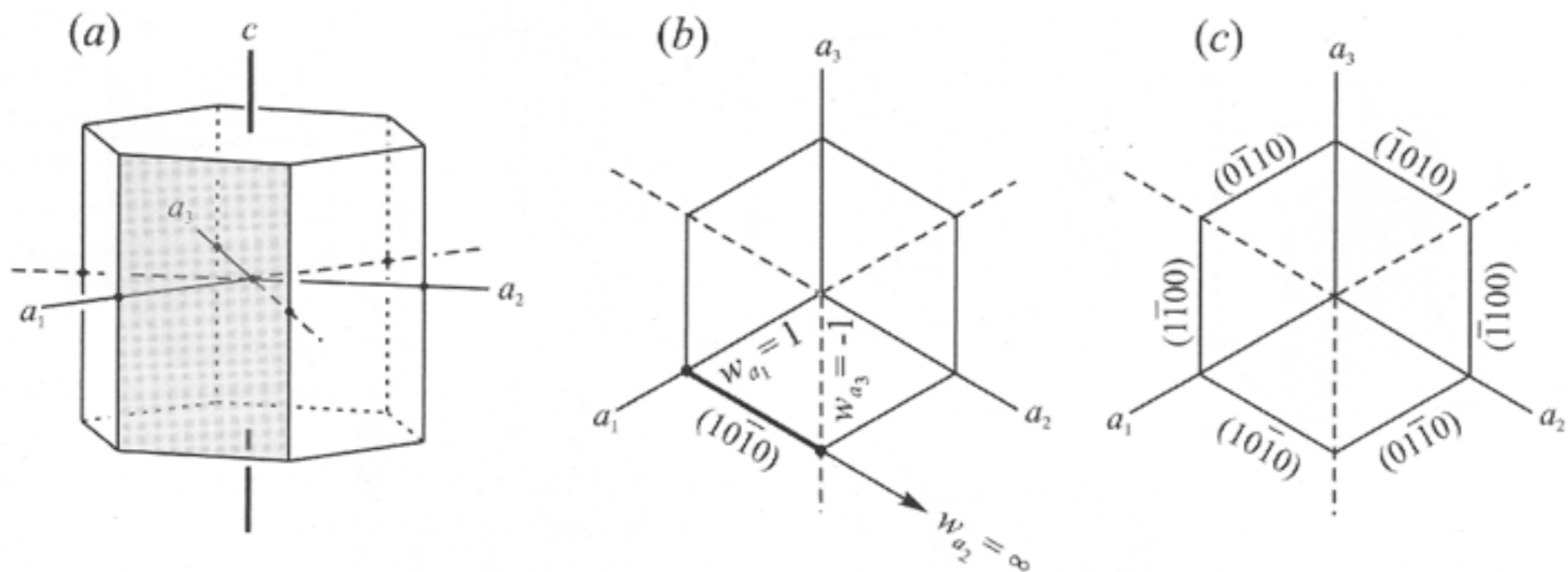


Figure 2.25 Miller-Bravais indices in the hexagonal crystal system. (a) Hexagonal crystal with a_1 , a_2 , a_3 , and c crystal axes. The a axes are parallel to 2-fold rotation axes and are 120° from each other. The shaded face cuts the a_1 and $-a_3$ axes and is parallel to a_2 and c . (b) Top view of the unit cell showing the unit cell intercepts that yield a Miller-Bravais index of (10 $\bar{1}$ 0). (c) Top view of the crystal showing the Miller-Bravais indices for all the vertical faces. The top and bottom faces are (0001) and (000 $\bar{1}$), respectively. See text for discussion.