

( )

$$2n^2$$

s-, p-, d- f-

(n), (l), (m) (s).

\_\_\_\_\_ (n).

(n = 1, 2, 3 ...)

Cd

c

(n = 5).

n = 5.  
(n = 1, n = 2, n = 3, n = 4, n = 5);

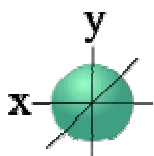
\_\_\_\_\_ (l)  
0 (n - 1).

n

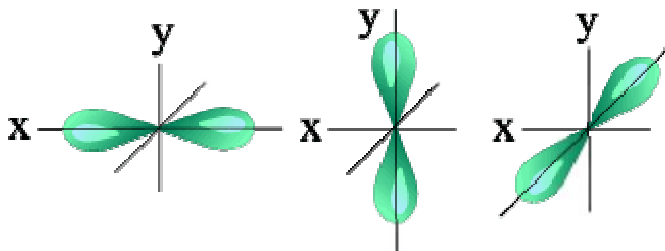
, c

n l-

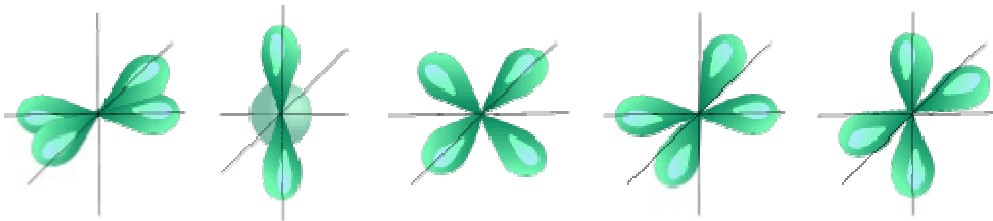
l=0 s-	, s-	-
l=1 p-	, p-	-
l=2 d-	, d-	-
f-	, f-	-



s-



p-



d-

$$l = (n - 1) = 0 \quad (n = 1)$$

- 1s.

;  
 : l = 0, s-  
 ; l = 1, p-  
 - 2s 2p.  
 ; l = 1, p-  
 ; l = 2, d-  
 : l = 0, s-

(n = 3)

3s, 3p 3d.

\_\_\_\_\_ (m)

$$(2l + 1)$$

s- (l = 0)

m = 0.

p- (l = 1) -

(2l + 1 = 3): m = -1, 0, +1.

d- (l = 2) -

(2l + 1 = 5): m = -2, -1, 0,

+1, +2.

-7, s- , p- , d- , f-

\_\_\_\_\_ (s)

$$+1/2 \quad -1/2$$

1.

(n, l, m, s)

(c

2.

(

).

(n +

l),

n.

(n + l)

$$1s < 2s < 2p < 3s < 3p < 4s < 3d < 4p < 5s < 4d < 5p < 6s < 5d \approx 4f < 6p < 7s.$$

3.

- 1)  $n$  ;
- 2) s- , p- d- (l);
- 3)  $(n + l)$  ( );
- 4) , ...
- 5)  $2n^2$  ,  $n^2$  .  $n$

6 ( s) 6 , 55 . C ( 55)

