

1

H

1s¹

3

Li

[He]2s¹

11

Na

[Ne]3s¹

19

K

[Ar]4s¹

37

Rb

[Kr]5s¹

55

Cs

[Xe]6s¹

87

Fr

[Rn]7s¹

4

Be

[He]2s²

12

Mg

[Ne]3s²

20

Ca

[Ar]4s²

38

Sr

[Kr]5s²

56

Ba

[Xe]6s²

88

Ra

[Rn]7s²

21

Sc

[Ar]4s²3d¹

39

Y

[Kr]5s²4d¹

57-71

La-Lu

89-103

Ac-Lr

22

Ti

[Ar]4s²3d²

40

Zr

[Kr]5s²4d²

72

Hf

5d

104

Rf

6d

23

V

[Ar]4s²3d³

41

Nb

[Kr]5s¹4d⁴

73

Ta

[Xe]4f¹⁴6s²5d³

105

Db

[Rn]5f¹⁴7s²6d³

24

Cr

[Ar]4s¹3d⁵

42

Mo

[Kr]5s¹4d⁵

74

W

[Xe]4f¹⁴6s²5d³

106

Sg

[Rn]5f¹⁴7s²6d⁴

25

Mn

[Ar]4s²3d⁵

43

Tc

[Kr]5s²4d⁵

75

Re

[Xe]4f¹⁴6s²5d⁴

107

Bh

[Rn]5f¹⁴7s²6d⁵

26

Fe

[Ar]4s²3d⁶

44

Ru

[Rn]5s¹4d⁷

76

Os

[Xe]4f¹⁴6s²5d⁶

108

Hs

[Rn]5f¹⁴7s²6d⁶

27

Co

[Ar]4s²3d⁷

45

Rh

[Kr]5s¹4d⁸

77

Ir

[Xe]4f¹⁴6s²5d⁷

109

Mt

[Rn]5f¹⁴7s²6d⁷

28

Ni

[Ar]4s²3d⁸

46

Pd

[Kr]4d¹⁰

78

Pt

[Xe]4f¹⁴6s¹5d⁹

110

Ds

[Rn]5f¹⁴7s²6d⁸

29

Cu

[Ar]3d¹⁰4s¹

47

Ag

[Kr]4d¹⁰5s¹

79

Au

[Xe]4f¹⁴5d¹⁰6s¹

111

Rg

[Rn]5f¹⁴6d¹⁰7s²

30

Zn

[Ar]3d¹⁰4s²

48

Cd

[Kr]4d¹⁰5s²

80

Hg

[Xe]4f¹⁴5d¹⁰6s²

112

Cn

[Rn]5f¹⁴6d¹⁰7s²

31

Ga

[Ar]3d¹⁰4s²4p¹

49

In

[Kr]4d¹⁰5s²5p¹

81

Tl

[Xe]5d¹⁰6s²6p¹

113

Nh

[Rn]6d¹⁰7s²7p¹

32

Ge

[Ar]3d¹⁰4s²4p²

50

Sn

[Kr]4d¹⁰5s²5p²

82

Pb

[Xe]5d¹⁰6s²6p²

114

Fl

[Rn]6d¹⁰7s²7p²

33

As

[Ar]3d¹⁰4s²4p³

51

Sb

[Kr]4d¹⁰5s²5p³

83

Bi

[Xe]5d¹⁰6s²6p³

115

Mc

[Rn]6d¹⁰7s²7p³

34

Se

[Ar]3d¹⁰4s²4p⁴

52

Te

[Kr]4d¹⁰5s²5p⁴

84

Po

[Xe]5d¹⁰6s²6p⁴

116

Lv

[Rn]6d¹⁰7s²7p⁴

35

Br

[Ar]3d¹⁰4s²4p⁵

53

I

[Kr]4d¹⁰5s²5p⁵

85

At

[Xe]5d¹⁰6s²6p⁵

117

Ts

[Rn]6d¹⁰7s²7p⁵

36

Kr

[Ar]4d¹⁰5s²5p⁶

54

Xe

[Kr]4d¹⁰5s²5p⁶

86

Rn

[Xe]5d¹⁰6s²6p⁶

118

Og

[Rn]6d¹⁰7s²7p⁶

57

La

[Xe]6s²5d¹

71

Lu

[Xe]6s²4f¹⁴5d¹

58

Ce

[Xe]6s²4f¹5d¹

70

Yb

[Xe]6s²4f¹⁴

59

Pr

[Xe]6s²4f³

69

Tm

[Xe]6s²4f¹³

60

Nd

[Xe]6s²4f⁴

70

Yb

[Xe]6s²4f¹⁴

61

Pm

[Xe]6s²4f⁵

101

Md

[Rn]7s²5f¹³

62

Sm

[Xe]6s²4f⁶

102

No

[Rn]7s²5f¹⁴

63

Eu

[Xe]6s²4f⁷

103

Lr

[Rn]7s²5f¹⁴6d¹

64

Gd

[Xe]6s²4f⁷5d¹

104

Ac

[Rn]7s²5f¹⁴

65

Tb

[Xe]6s²4f⁹

105

Th

[Rn]7s²5f¹⁴6d²

66

Dy

[Xe]6s²4f¹⁰

106

Pa

[Rn]7s²5f¹⁴6d¹

67

Ho

[Xe]6s²4f¹¹

107

U

[Rn]7s²5f¹⁴6d¹

68

Er

[Xe]6s²4f¹²

108

Np

[Rn]7s²5f¹⁴6d¹

69

Tm

[Xe]6s²4f¹³

109

Pu

[Rn]7s²5f¹⁴6d¹

70

Yb

[Xe]6s²4f¹⁴

110

Fm

[Rn]7s²5f¹⁴

71

Lu

[Xe]6s²4f¹⁴5d¹

111

Es

[Rn]7s²5f¹⁴

72

Hf

[Xe]6s²4f¹⁴5d²

112

Cf

[Rn]7s²5f¹⁴

73

Ta

[Xe]6s²4f¹⁴5d³

113

Bk

[Rn]7s²5f¹⁴

74

W

[Xe]6s²4f¹⁴5d⁴

114

Cm

[Rn]7s²5f¹⁴

75

Re

[Xe]6s²4f¹⁴5d⁵

115

Bk

[Rn]7s²5f¹⁴

76

Os

[Xe]6s²4f¹⁴5d⁶

116

Cf

[Rn]7s²5f¹⁴

77

Ir

[Xe]6s²4f¹⁴5d⁷

117

Es

[Rn]7s²5f¹⁴

78

Pt

[Xe]6s²4f¹⁴5d⁸

118

Fm

[Rn]7s²5f¹⁴

79

Au

[Xe]6s²4f¹⁴5d⁹

119

Gd

[Rn]7s²5f¹⁴

80

Hg

[Xe]6s²4f¹⁴5d¹⁰

120

Lu

[Xe]6s²4f¹⁴5d¹

81

Tl

[Xe]6s²4f¹⁴5d¹⁰6s¹

121

Be

[He]2s²

82

Pb

[Xe]6s²4f¹⁴5d¹⁰6s²

122

B

[He]2s²2p¹

83

Bi

[Xe]6s²4f¹⁴5d¹⁰6s²6p³

123

C

[He]2s²2p²

84

Po

[Xe]6s²4f¹⁴5d¹⁰6s²6p⁴

124

N

[He]2s²2p³

85

At

[Xe]6s²4f¹⁴5d¹⁰6s²6p⁵

125

O

[He]2s²2p⁴

86

Rn

[Xe]6s²4f¹⁴5d¹⁰6s²6p⁶

126

F

[He]2s²2p⁵

87

Fr

[Rn]7s²5f¹⁴6d¹

127

Ne

[He]2s²2p⁶

88

Ra

[Rn]7s²5f¹⁴6d²

128

Ar

[Ne]3s²3p⁶

89

Ac

[Rn]7s²5f¹⁴6d¹

129

Kr

[Ar]4s²3d¹⁰4p⁶

90

Th

[Rn]7s²5f¹⁴6d²

130

Se

[Ar]3d¹⁰4s²4p⁴

91

Pa

[Rn]7s²5f¹⁴6d¹

131

Ge

[Ar]3d¹⁰4s²4p²

92

U

[Rn]7s²5f¹⁴6d¹

132

As

[Ar]3d¹⁰4s²4p³

93

Np

[Rn]7s²5f¹⁴6d¹

133

Sb

[Kr]4d¹⁰5s²5p³

94

Pu

[Rn]7s²5f¹⁴6d¹

134

Te

[Kr]4d¹⁰5s²5p⁴

95

Am

[Rn]7s²5f¹⁴6d¹

135

I

[Kr]4d¹⁰5s²5p⁵

96

Cm

[Rn]7s²5f¹⁴6d¹

136

Xe

[Kr]4d¹⁰5s²5p⁶

97

Bk

[Rn]7s²5f¹⁴6d¹

137

Br

[Ar]3d¹⁰4s²4p⁵

98

Cf

[Rn]7s²5f¹⁴6d¹

138

Kr

[Ar]4s²3d¹⁰4p⁶

99

Es

[Rn]7s²5f¹⁴6d¹

139

Cl

[Ar]3d¹⁰4s²4p⁵

100

Fm

[Rn]7s²5f¹⁴6d¹

140

S

[Ne]3s²3p⁴

101

Md

[Rn]7s²5f¹⁴6d¹

141

P

[Ne]3s²3p³

102

No

[Rn]7s²5f¹⁴6d¹

142

Si

[Ne]3s²3p²

103

Lr

[Rn]7s²5f¹⁴6d¹

143

Al

[Ne]3s²3p¹

1

H

1s¹

2

He

1s²

3

Li

[He]2s¹

4

Be

[He]2s²

5

B

[He]2s²2p¹

6

C

[He]2s²2p²

7

N

[He]2s²2p³

8

O

[He]2s²2p⁴

9

F

[He]2s²2p⁵

10

Ne

[He]2s²2p⁶

11

Na

[Ne]3s¹

12

Mg

[Ne]3s²

13

Al

[Ne]3s²3p¹

14

Si

[Ne]3s²3p²

15

P

[Ne]3s²3p³

16

S

[Ne]3s²3p⁴

17

Cl

[Ne]3s²3p⁵

18

Ar

[Ne]3s²3p⁶

19

K

[Ar]4s¹

20

Ca

[Ar]4s²

21

Sc

[Ar]4s²3d¹

22

Ti

[Ar]4s²3d²

23

V

[Ar]4s²3d³

24

Cr

[Ar]4s¹3d⁵

25

Mn

[Ar]4s²3d⁵

26

Fe

[Ar]4s²3d⁶

27

Co

[Ar]4s²3d⁷

28

Ni

[Ar]4s²3d⁸

29

Cu

[Ar]3d¹⁰4s¹

30

Zn

[Ar]3d¹⁰4s²

31

Ga

[Ar]3d¹⁰4s²4p¹

32

Ge

[Ar]3d¹⁰4s²4p²

33

As

[Ar]3d¹⁰4s²4p³

34

Se

[Ar]3d¹⁰4s²4p⁴

35

Br

[Ar]3d¹⁰4s²4p⁵

36

Kr

[Ar]4d¹⁰5s²5p⁶

37

Rb

[Kr]5s¹

38

Sr

[Kr]5s²

39

Y

[Kr]5s²4d¹

40

Zr

[Kr]5s²4d²

41

Nb

[Kr]5s¹4d⁴

42

Mo

[Kr]5s¹4d⁵

43

Tc

[Kr]5s²4d⁵

44

Ru

[Rn]5s¹4d⁷

45

Rh

[Kr]5s¹4d⁸

46

Pd

[Kr]4d¹⁰

47

Ag

[Kr]4d¹⁰5s¹

48

Cd

[Kr]4d¹⁰5s²

49

In

[Kr]4d¹⁰5s²5p¹

50

Sn

[Kr]4d¹⁰5s²5p²

51

Sb

[Kr]4d¹⁰5s²5p³

52

Te

[Kr]4d¹⁰5s²5p⁴

53

I

[Kr]4d¹⁰5s²5p⁵

54

Xe

[Kr]4d¹⁰5s²5p⁶

55

Cs

[Xe]6s¹

56

Ba

[Xe]6s²

57-71

La-Lu

72

Hf

5d

73

Ta

[Xe]4f¹⁴6s²5d³

74

W

[Xe]4f¹⁴6s²5d³

75

Re

[Xe]4f¹⁴6s²5d⁴

76

Os

[Xe]4f¹⁴6s²5d⁶

77

Ir

[Xe]4f¹⁴6s²5d⁷

78

Pt

[Xe]4f¹⁴6s¹5d⁹

79

Au

[Xe]4f¹⁴5d¹⁰6s¹

80

Hg

[Xe]4f¹⁴5d¹⁰6s²

81

Tl

[Xe]5d¹⁰6s²6p¹

82

Pb

[Xe]5d¹⁰6s²6p²

83

Bi

[Xe]5d¹⁰6s²6p³

84

Po

[Xe]5d¹⁰6s²6p⁴

85

At

[Xe]5d¹⁰6s²6p⁵

86

Rn

[Xe]5d¹⁰6s²6p⁶

87

Fr

[Rn]7s¹

88

Ra

[Rn]7s²

89-103

Ac-Lr

104

Rf

6d

105

Db

[Rn]5f¹⁴7s²6d³

106

Sg

[Rn]5f¹⁴7s²6d⁴

107

Bh

[Rn]5f¹⁴7s²6d⁵

108

Hs

[Rn]5f¹⁴7s²6d⁶

109

Mt

[Rn]5f¹⁴7s²6d⁷

110

Ds

[Rn]5f¹⁴7s²6d⁸

111

Rg

[Rn]5f¹⁴6d¹⁰7s²

112

Cn

[Rn]5f¹⁴6d¹⁰7s²

113

Nh

[Rn]6d¹⁰7s²7p¹

114

Fl

[Rn]6d¹⁰7s²7p²

115

Mc

[Rn]6d¹⁰7s²7p³

116

Lv

[Rn]6d¹⁰7s²7p⁴

117

Ts

[Rn]6d¹⁰7s²7p⁵

118

Og

[Rn]6d¹⁰7s²7p⁶

119

Gd

[Xe]6s²4f⁷5d¹