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# 计算机与应用化学

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周期	Gruppo I — H <sup>+</sup>	Gruppo II — He <sup>+</sup>	Gruppo III — B <sup>3+</sup> Be <sup>2+</sup>	Gruppo IV — C <sup>4+</sup> B <sup>3+</sup>	Gruppo V — N <sup>5+</sup> P <sup>3+</sup>	Gruppo VI — O <sup>6+</sup> S <sup>2+</sup>	Gruppo VII — F <sup>7+</sup> Cl <sup>5+</sup>	Gruppo VIII — Ne <sup>8+</sup>
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2	Li=3 Be=4	Be=4 B=3	Al=13 B=3 Be=4	Si=14 C=4 B=3	P=15 N=5	S=16 O=6	Cl=17 F=7	Ne=8
3	Li=3 Na=11 Mg=12	Be=4 Mg=12	Al=13 Si=14 P=15	Si=14 C=4 N=5	P=15 S=2	S=16 Cl=5	Cl=17 Ar=18	Ne=18
4	Mg=12 Ca=12	Ca=12	Al=13 Si=14 P=15	Si=14 C=4 N=5	P=15 S=2	S=16 Cl=5	Cl=17 Ar=18	Ne=18
5	(Ca=12)	(Ca=12)	(Al=13)	(Si=14)	(P=15)	(S=16)	(Cl=17)	(Ar=18)
6	(Mg=12)	(Mg=12)	(Al=13)	(Si=14)	(P=15)	(S=16)	(Cl=17)	(Ar=18)
7	(Mg=12)	(Mg=12)	(Al=13)	(Si=14)	(P=15)	(S=16)	(Cl=17)	(Ar=18)
8	(Ca=12)	(Ca=12)	(Al=13)	(Si=14)	(P=15)	(S=16)	(Cl=17)	(Ar=18)
9	(Ca=12)	(Ca=12)	(Al=13)	(Si=14)	(P=15)	(S=16)	(Cl=17)	(Ar=18)
10	(Ca=12)	(Ca=12)	(Al=13)	(Si=14)	(P=15)	(S=16)	(Cl=17)	(Ar=18)
11	(Ca=12)	(Ca=12)	(Al=13)	(Si=14)	(P=15)	(S=16)	(Cl=17)	(Ar=18)
12	(Ca=12)	(Ca=12)	(Al=13)	(Si=14)	(P=15)	(S=16)	(Cl=17)	(Ar=18)

1	H hydrogen (100.7, 1.008)	2	He helium (40.028, 2.013)
3	锂 lithium 6.94 (7.013, 6.9407)	4	铍 beryllium 9.0122
5	钠 sodium 22.990 (22.989, 24.307)	6	镁 magnesium 12.99 (12.990, 12.999)
7	钾 potassium 38.998 (38.998, 40.0784)	8	钙 calcium 40.078 (40.078, 40.0784)
9	铷 rubidium 85.498 (85.498, 87.82)	10	锶 strontium 88.908 (88.908, 91.224)
11	铯 cesium 132.91 (132.91, 137.33)	12	钡 barium 137.33 (137.33)
13	钪 scandium 44.958 (44.958, 47.887)	14	钛 titanium 47.887 (47.887, 50.442)
15	钒 vanadium 50.998 (50.998, 51.998)	16	铬 chromium 54.938 (54.938, 55.845)
17	锰 manganese 55.933 (55.933, 56.933)	18	铁 iron 55.845 (55.845, 56.845)
19	钴 cobalt 58.933 (58.933, 60.833)	20	镍 nickel 59.833 (59.833, 61.833)
21	铜 copper 63.635 (63.635, 65.635)	22	镓 gallium 69.723 (69.723, 72.928)
23	铟 indium 74.022 (74.022, 75.921)	24	磷 phosphorus 75.981 (75.981, 76.981)
25	锡 tin 114.81 (114.81, 116.81)	26	硫 sulfur 32.06 (32.06, 33.06)
27	锑 antimony 121.71 (121.71, 123.71)	28	氯 chlorine 35.45 (35.45, 36.45)
29	镓 germanium 74.022 (74.022, 75.921)	30	溴 bromine 79.901 (79.901, 80.901)
31	锗 germanium 79.901 (79.901, 81.901)	32	氪 krypton 83.82 (83.82, 85.82)
33	砷 arsenic 93.87 (93.87, 95.87)	34	氙 xenon 131.80 (131.80, 133.80)
35	锡 tin 116.71 (116.71, 118.71)	36	氖 neon 10.00 (10.00, 11.00)
37	锑 antimony 123.71 (123.71, 125.71)	38	氩 argon 35.45 (35.45, 36.45)
39	碲 tellurium 127.85 (127.85, 129.85)	40	氡 radon 222.00 (222.00, 224.00)
41	钋 polonium 200.98 (200.98, 202.98)	42	砹 astatine 210.2
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45	钋 polonium 168.07 (168.07, 170.07)	46	砹 astatine 202.2
47	钋 polonium 160.22 (160.22, 162.22)	48	砹 astatine 200.98 (200.98, 202.98)
49	钋 polonium 162.22 (162.22, 164.22)	50	砹 astatine 198.91 (198.91, 200.91)
51	钋 polonium 164.22 (164.22, 166.22)	52	砹 astatine 197.91 (197.91, 199.91)
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# 计算机与应用化学

## Jisuanji yu Yingyong Huaxue

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