Table of Polyatomic Interferences in ICP-MS Isotope Abundance Interference Reference[1]

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A Table of Polyatomic Interferences in ICP-MS

Isotope	Abundance	Interference	Reference
^{107}Ag	51.8	$^{91}Zr^{16}O^+$	(6)(9)
^{109}Ag	48.2	$^{92}Zr^{16}O^1H^+$	(9)
^{27}Al	100.	$^{12}C^{15}N^+$, $^{13}C^{14}N^+$, $^{14}N^2$ spread, $^1H^{12}C^{14}N^+$	(11)(18)(29)
^{75}As	100.	$^{40}Ar^{35}Cl^+$, $^{59}Co^{16}O^+$, $^{36}Ar^{38}Ar^1H^+$, $^{38}Ar^{37}Cl^+$, $^{36}Ar^{39}K$,	(2)(9)(15)(19)(22)(33)(34)
		$^{43}Ca^{16}O_2$, $^{23}Na^{12}C^{40}Ar$, $^{12}C^{31}P^{16}O_2^+$	(35)
^{197}Au	100.	$^{181}Ta^{16}O^+$	(9)
^{11}B	80.09	^{12}C spread	(18)
^{130}Ba	0.106	$^{98}Ru^{16}O_2^+$	(32)
^{132}Ba	0.101	$^{100}Ru^{16}O_2^+$	(32)
^{134}Ba	2.417	$^{102}Ru^{16}O_2^+$	(32)
^{136}Ba	7.854	$^{104}Ru^{16}O_2^+$	(32)
^{209}Bi	100.	$^{193}Ir^{16}O^+$	(32)
^{79}Br	50.54	$^{40}Ar^{39}K^+$, $^{31}P^{16}O_3^+$, $^{38}Ar^{40}Ar^1H^+$	(19)(22)
^{81}Br	49.46	$^{32}S^{16}O_3{}^1H^+$, $^{40}Ar^{40}Ar^1H^+$, $^{33}S^{16}O_3^+$	(19)(22)
^{40}Ca	96.97	$^{40}Ar^+$	(4)(22)
^{42}Ca	0.64	$^{40}Ar^1H_2$	(12)(22)
^{43}Ca	0.145	$^{27}Al^{16}O^+$	(21)
^{44}Ca	2.06	$^{12}C^{16}O_2$, $^{14}N_2{}^{16}O^+$, $^{28}Si^{16}O^+$	(12)(22)(29)
^{46}Ca	0.003	$^{14}N^{16}O_2^+$, $^{32}S^{14}N^+$	(22)
^{48}Ca	0.19	$^{33}S^{15}N^+$, $^{34}S^{14}N^+$, $^{32}S^{16}O^+$	(22)
^{110}Cd	12.5	$^{39}K_2{}^{16}O^+$	(6)
^{111}Cd	12.8	$^{95}Mo^{16}O^+$, $^{94}Zr^{16}O^1H^+$, $^{39}K_2{}^{16}O_2{}^1H^+$	(1)(6)
^{112}Cd	24.1	$^{40}Ca_2{}^{16}O$, $^{40}Ar_2{}^{16}O$, $^{96}Ru^{16}O^+$	(6)(32)
^{35}Cl	75.77	$^{16}O^{18}O^1H^+$, $^{34}S^1H^+$, $^{35}Cl^+$	(22)
^{37}Cl	24.23	$^{36}Ar^1H^+$, $^{36}S^1H^+$, $^{37}Cl^+$	(22)
^{59}Co	100.	$^{43}Ca^{16}O^+$, $^{42}Ca^{16}O^1H^+$, $^{24}Mg^{35}Cl^+$, $^{36}Ar^{23}Na^+$, $^{40}Ar^{18}O^1H^+$,	(5)(8)(9)(13)(19)(22)(29)(34)
		$^{40}Ar^{19}F^+$	
^{50}Cr	4.35	$^{34}S^{16}O^+$, $^{36}Ar^{14}N^+$, $^{35}Cl^{15}N^+$ $^{36}S^{14}N^+$, $^{32}S^{18}O^+$, $^{33}S^{17}O^+$	(2)(15)(22)
^{52}Cr	83.76	$^{35}Cl^{16}O^1H^+$, $^{40}Ar^{12}C^+$, $^{36}Ar^{16}O^+$, $^{37}Cl^{15}N^+$	(1)(2)(9)(15)(18)
		$^{34}S^{18}O^+$, $^{36}S^{16}O^+$, $^{38}Ar^{14}N^+$, $^{36}Ar^{15}N^1H^+$, $^{35}Cl^{17}O^+$	(19)(22)(29)(35)
^{53}Cr	9.51	$^{37}Cl^{16}O^+$, $^{38}Ar^{15}N^+$, $^{38}Ar^{14}N^1H^+$, $^{36}Ar^{17}O^+$, $^{36}Ar^{16}O^1H^+$,	(1)(22)(29)(34)
		$^{35}Cl^{17}O^1H^+$, $^{35}Cl^{18}O^+$, $^{36}S^{17}O^+$, $^{40}Ar^{13}C^+$	
^{54}Cr	2.38	$^{37}Cl^{16}O^1H^+$, $^{40}Ar^{14}N^+$, $^{38}Ar^{15}N^1H^+$, $^{36}Ar^{18}O^+$, $^{38}Ar^{16}O^+$,	(2)(22)(29)(34)
		$^{36}Ar^{17}O^1H^+$, $^{37}Cl^{17}O^+$, $^{19}F_2{}^{16}O^+$	
^{133}Cs	100.	$^{101}Ru^{16}O_2^+$	(32)
^{63}Cu	69.1	$^{31}P^{16}O_2^+$, $^{40}Ar^{23}Na^+$, $^{47}Ti^{16}O^+$, $^{23}Na^{40}Ca^+$, $^{46}Ca^{16}O^1H^+$,	(2)(9)(19)(28)(29)
		$^{36}Ar^{12}C^{14}N^1H^+$, $^{14}N^{12}C^{37}Cl^+$, $^{16}O^{12}C^{35}Cl^+$	
65Cu	30.9	$^{49}Ti^{16}O^+$, $^{32}S^{16}O_2{}^1H^+$, $^{40}Ar^{25}Mg^+$, $^{40}Ca^{16}O^1H^+$, $^{36}Ar^{14}N_2{}^1H^+$,	(5)(15)(17)(21)(22)(29)(34)
		$^{32}S^{33}S^+$, $^{32}S^{16}O^{17}O^+$, $^{33}S^{16}O_2^+$, $^{12}C^{16}O^{37}Cl^+$, $^{12}C^{18}O^{35}Cl^+$,	
		$^{31}P^{16}O^{18}O^+$	
^{163}Dy	24.97	$^{147}Sm^{16}O^+$	(27)(38)
^{166}Er	33.6	$^{160}Nd^{16}O$, $^{150}Sm^{16}O$	(38)
^{167}Er	22.94	$^{151}Eu^{16}O^+$	(27)
^{151}Eu	47.82	$^{135}Ba^{16}O^+$	(23)(27)
^{153}Eu	52.2	$^{137}Ba^{16}O^+$	(9)(38)

A Table of Polyatomic Interferences in ICP-MS (cont'd)

Isotope	Abundance	Interference	Reference
^{54}Fe	5.82	$^{37}Cl^{16}O^{1}H^{+}$, $^{40}Ar^{14}N$, $^{38}Ar^{15}N^{1}H^{+}$, $^{36}Ar^{18}O^{+}$, $^{38}Ar^{16}O^{+}$, $^{36}Ar^{17}O^{1}H^{+}$, $^{36}S^{18}O^{+}$, $^{35}Cl^{18}O^{1}H^{+}$, $^{37}Cl^{17}O$	(15)(18)(22)(29)(36)
^{56}Fe	91.66	$^{40}Ar^{16}O^{+}$, $^{40}Ca^{16}O^{+}$, $^{40}Ar^{15}N^{1}H^{+}$, $^{38}Ar^{18}O^{+}$, $^{38}Ar^{17}O^{1}H^{+}$ $^{37}Cl^{18}O^{1}H^{+}$	(3)(22)(29)
^{57}Fe	2.19	$^{40}Ar^{16}O^{1}H^{+}$, $^{40}Ca^{16}O^{1}H^{+}$, $^{40}Ar^{17}O^{+}$, $^{38}Ar^{18}O^{1}H^{+}$, $^{38}Ar^{19}F^{+}$	(8)(9)(21)(22)(29)(34)
^{58}Fe	0.33	$^{40}Ar^{18}O^{+}$, $^{40}Ar^{17}O^{1}H^{+}$	(22)
^{69}Ga	60.16	$^{35}Cl^{16}O^{18}O^{+}$, $^{35}Cl^{17}O_2^{+}$, $^{37}Cl^{16}O_2^{+}$, $^{36}Ar^{33}S^{+}$, $^{33}S^{18}O_2^{+}$, $^{34}S^{17}O^{18}O^{+}$, $^{36}S^{16}O^{17}O^{+}$, $^{33}S^{36}S^{+}$	(22)
^{71}Ga	39.84	$^{35}Cl^{18}O_2^{+}$, $^{37}Cl^{16}O^{18}O^{+}$, $^{37}Cl^{17}O_2^{+}$, $^{36}Ar^{35}Cl^{+}$, $^{36}S^{17}O^{18}O^{+}$, $^{38}Ar^{33}S^{+}$	(22)
^{155}Gd	14.8	$^{139}La^{16}O^{+}$	(3)
^{157}Gd	15.68	$^{138}B^{19}F^{+}$, $^{141}Pr^{16}O^{+}$	(26)(27)
^{70}Ge	20.51	$^{40}Ar^{14}N^{16}O^{+}$, $^{35}Cl^{17}O^{18}O^{+}$, $^{37}Cl^{16}O^{17}O^{+}$, $^{34}S^{18}O_2^{+}$, $^{36}S^{16}O^{18}O^{+}$, $^{36}S^{17}O_2^{+}$, $^{34}S^{36}S^{+}$, $^{36}Ar^{34}S^{+}$, $^{38}Ar^{32}S^{+}$, $^{35}Cl_2^{+}$	(22)(30)
^{72}Ge	27.4	$^{36}Ar_2^{+}$, $^{37}Cl^{17}O^{18}O^{+}$, $^{35}Cl^{37}Cl^{+}$, $^{36}S^{18}O_2^{+}$, $^{36}S_2^{+}$, $^{36}Ar^{36}S^{+}$ $^{56}Fe^{16}O^{+}$, $^{40}Ar^{16}O_2^{+}$, $^{40}Ca^{16}O_2^{+}$, $^{40}Ar^{32}S^{+}$	(22)(28)
^{73}Ge	7.76	$^{36}Ar_2{}^{1}H^{+}$, $^{37}Cl^{18}O_2^{+}$, $^{36}Ar^{37}Cl^{+}$, $^{38}Ar^{35}Cl^{+}$, $^{40}Ar^{33}S^{+}$	(22)
^{74}Ge	36.56	$^{40}Ar^{34}S^{+}$, $^{36}Ar^{38}Ar^{+}$, $^{37}Cl^{37}Cl^{+}$, $^{38}Ar^{36}S^{+}$	(22)
^{76}Ge	7.77	$^{36}Ar^{40}Ar^{+}$, $^{38}Ar^{38}Ar^{+}$, $^{40}Ar^{36}S^{+}$	(22)
^{177}Hf	18.5	$^{161}Dy^{16}O^{+}$	(27)
^{165}Ho	100.	$^{149}Sm^{16}O$	(27)
^{113}In	4.3	$^{96}Ru^{17}O^{+}$	(32)
^{39}K	93.08	$^{38}Ar^{1}H^{+}$	(22)(29)
^{40}K	0.01	$^{40}Ar^{+}$	(22)
^{41}K	6.91	$^{40}Ar^{1}H^{+}$	(22)
^{78}Kr	0.35	$^{38}Ar^{40}Ar^{+}$	(22)
^{80}Kr	2.27	$^{40}Ar_2^{+}$, $^{32}S^{16}O_3^{+}$	(22)
^{82}Kr	11.56	$^{40}Ar^{40}Ar^{1}H_2^{+}$, $^{34}S^{16}O_3^{+}$, $^{33}S^{16}O_3{}^{1}H^{+}$	(22)
^{83}Kr	11.55	$^{34}S^{16}O_3{}^{1}H^{+}$	(22)
^{84}Kr	56.9	$^{36}S^{16}O_3^{+}$	(22)
^{175}Lu	97.41	$^{159}Tb^{16}O^{+}$	(27)(38)
^{24}Mg	78.7	$^{12}C_2^{+}$	(29)
^{25}Mg	10.13	$^{12}C_2{}^{1}H^{+}$	(29)
^{26}Mg	11.17	$^{12}C^{14}N^{+}$, $^{12}C_2{}^{1}H_2^{+}$, $^{12}C^{13}C^{1}H^{+}$	(29)
^{55}Mn	100.	$^{40}Ar^{14}N^{1}H^{+}$, $^{39}K^{16}O^{+}$, $^{37}Cl^{18}O^{+}$, $^{40}Ar^{15}N^{+}$, $^{38}Ar^{17}O^{+}$, $^{36}Ar^{18}O^{1}H^{+}$ $^{38}Ar^{16}O^{1}H^{+}$, $^{37}Cl^{17}O^{1}H^{+}$, $^{23}Na^{32}S^{+}$, $^{36}Ar^{19}F^{+}$	(2)(9)(11)(19)(22)(29)(34) (35)
^{94}Mo	9.3	$^{39}K_2{}^{16}O^{+}$	(11)
^{95}Mo	15.9	$^{40}Ar^{39}K^{16}O^{+}$, $^{79}Br^{16}O^{+}$	(11)
^{96}Mo	16.7	$^{39}K^{41}K^{16}O^{+}$, $^{79}Br^{17}O^{+}$	(11)
^{97}Mo	9.6	$^{40}Ar_2{}^{16}O^{1}H^{+}$, $^{40}Ca_2{}^{16}O^{1}H^{+}$, $^{40}Ar^{41}K^{16}O^{+}$, $^{81}Br^{16}O^{+}$	(6)(11)
^{98}Mo	24.1	$^{81}Br^{17}O^{+}$, $^{41}K_2O^{+}$	(6)(11)
^{144}Nd	23.80	$^{96}Ru^{16}O_3^{+}$	(32)
^{146}Nd	17.19	$^{98}Ru^{16}O_3^{+}$	(32)
^{148}Nd	5.76	$^{100}Ru^{16}O^{3+}$	(32)
^{150}Nd	5.64	$^{102}Ru^{16}O_3^{+}$	(32)
^{58}Ni	67.77	$^{23}Na^{35}Cl^{+}$, $^{40}Ar^{18}O^{+}$, $^{40}Ca^{18}O^{+}$, $^{40}Ca^{17}O^{1}H^{+}$, $^{42}Ca^{16}O^{+}$, $^{29}Si_2^{+}$, $^{40}Ar^{17}O^{1}H^{+}$, $^{23}Na^{35}Cl^{+}$	(9)(16)(18)(19)(20)(22)(29)
^{60}Ni	26.16	$^{44}Ca^{16}O^{+}$, $^{23}Na^{37}Cl^{+}$, $^{43}Ca^{16}O^{1}H^{+}$	(3)(13)(26)(29)
^{61}Ni	1.25	$^{44}Ca^{16}O^{1}H^{+}$, $^{45}Sc^{16}O^{+}$	(1)(25)
^{62}Ni	3.66	$^{46}Ti^{16}O^{+}$, $^{23}Na^{39}K^{+}$, $^{46}Ca^{16}O^{+}$	(1)(9)(25)
^{64}Ni	1.16	$^{32}S^{16}O_2^{+}$, $^{32}S_2^{+}$	(22)(29)

A Table of Polyatomic Interferences in ICP-MS (cont'd)

Isotope	Abundance	Interference	Reference
^{31}P	100.	$^{14}N^{16}O^{1}H^{+}$, $^{15}N^{15}N^{1}H^{+}$, $^{15}N^{16}O^{+}$, $^{14}N^{17}O^{+}$, $^{13}C^{18}O^{+}$, $^{12}C^{18}O^{1}H^{+}$	(3)(22)(29)
^{206}Pb	24.1	$^{190}Pt^{16}O^{+}$	(32)
^{207}Pb	22.1	$^{191}Ir^{16}O^{+}$	(32)
^{208}Pb	52.4	$^{192}Pt^{16}O^{+}$	(32)
^{105}Pd	22.3	$^{40}Ar^{65}Cu^{+}$	(9)
^{103}Rh	100.	$^{40}Ar^{63}Cu^{+}$	(9)(26)
^{101}Ru	17.0	$^{40}Ar^{61}Ni^{+}$, $^{64}Ni^{37}Cl^{+}$	(9)
^{32}S	95.02	$^{16}O_2^{+}$, $^{14}N^{18}O^{+}$, $^{15}N^{17}O^{+}$, $^{14}N^{17}O^{1}H^{+}$, $^{15}N^{16}O^{1}H^{+}$, $^{32}S^{+}$ $^{14}N^{16}O^{1}H_2^{+}$	(9)(22)(29)
^{33}S	0.75	$^{15}N^{18}O^{+}$, $^{14}N^{18}O^{1}H^{+}$, $^{15}N^{17}O^{1}H^{+}$, $^{16}O^{17}O^{+}$, $^{16}O_2{}^{1}H^{+}$, $^{33}S^{+}$, $^{32}S^{1}H^{+}$	(22)(29)
^{34}S	4.21	$^{15}N^{18}O^{1}H^{+}$, $^{16}O^{18}O^{+}$, $^{17}O_2^{+}$, $^{16}O^{17}O^{1}H^{+}$, $^{34}S^{+}$, $^{33}S^{1}H^{+}$	(22)(29)
^{123}Sb	47.6	$^{94}Zr^{16}O_2$	(1)
^{45}Sc	100.	$^{12}C^{16}O_2{}^{1}H^{+}$, $^{28}Si^{16}O^{1}H^{+}$, $^{29}Si^{16}O^{+}$, $^{14}N_2{}^{16}O^{1}H^{+}$, $^{13}C^{16}O_2^{+}$	(2)(9)(22)(29)
^{74}Se	0.87	$^{37}Cl^{37}Cl^{+}$, $^{36}Ar^{38}Ar^{+}$, $^{38}Ar^{36}S^{+}$, $^{40}Ar^{34}S^{+}$	(9)(22)(35)
^{76}Se	9.02	$^{40}Ar^{36}Ar^{+}$, $^{38}Ar^{38}Ar^{+}$	(2)(10)(22)(35)
^{77}Se	7.58	$^{40}Ar^{37}Cl^{+}$, $^{36}Ar^{40}Ar^{1}H^{+}$, $^{38}Ar_2{}^{1}H^{+}$, $^{12}C^{19}F^{14}N^{16}O_2^{+}$	(2)(15)(19)(22)(34)
^{78}Se	23.52	$^{40}Ar^{38}Ar^{+}$, $^{38}Ar^{40}Ca^{+}$	(2)(24)(35)
^{80}Se	49.82	$^{40}Ar_2^{+}$, $^{32}S^{16}O_3^{+}$	(7)(19)(22)
^{82}Se	9.19	$^{12}C^{35}Cl_2^{+}$, $^{34}S^{16}O_3^{+}$, $^{40}Ar_2{}^{1}H_2^{+}$	(9)(11)(22)
^{28}Si	92.21	$^{14}N_2^{+}$, $^{12}C^{16}O^{+}$	(21)(22)(29)
^{29}Si	4.7	$^{14}N^{15}N^{+}$, $^{14}N_2{}^{1}H^{+}$, $^{13}C^{16}O^{+}$, $^{12}C^{17}O^{+}$, $^{12}C^{16}O^{1}H^{+}$	(22)(29)
^{30}Si	3.09	$^{15}N_2^{+}$, $^{14}N^{15}N^{1}H^{+}$, $^{14}N^{16}O^{+}$, $^{12}C^{18}O^{+}$, $^{13}C^{17}O^{+}$, $^{13}C^{16}O^{1}H^{+}$, $^{12}C^{17}O^{1}H^{+}$, $^{14}N_2{}^{1}H_2^{+}$, $^{12}C^{16}O^{1}H_2^{+}$	(22)(29)(31)
^{144}Sm	3.1	$^{96}Ru^{16}O_3^{+}$	(32)
^{147}Sm	15.0	$^{99}Ru^{16}O_3^{+}$	(32)
^{148}Sm	11.3	$^{100}Ru^{16}O_3^{+}$	(32)
^{149}Sm	13.8	$^{101}Ru^{16}O_3^{+}$	(32)
^{150}Sm	7.4	$^{102}Ru^{16}O_3^{+}$	(32)
^{152}Sm	26.7	$^{104}Ru^{16}O_3^{+}$	(32)
^{112}Sn	0.97	$^{96}Ru^{16}O^{+}$	(32)
^{115}Sn	0.34	$^{99}Ru^{16}O^{+}$	(32)
^{116}Sn	14.53	$^{100}Ru^{16}O^{+}$	(32)
^{117}Sn	7.68	$^{101}Ru^{16}O^{+}$	(32)
^{118}Sn	24.23	$^{102}Ru^{16}O^{+}$, $^{102}Pd^{16}O^{+}$	(32)
^{119}Sn	8.59	$^{103}Rh^{16}O^{+}$	(32)
^{120}Sn	32.59	$^{104}Ru^{16}O^{+}$, $^{104}Pd^{16}O^{+}$	(32)
^{122}Sn	4.63	$^{106}Pd^{16}O^{+}$	(32)
^{124}Sn	5.79	$^{108}Pd^{16}O^{+}$	(32)
^{84}Sr	0.56	$^{36}S^{16}O_3^{+}$	(22)
^{86}Sr	9.86	$^{85}Rb^{1}H^{+}$	(26)(27)

A Table of Polyatomic Interferences in ICP-MS (cont'd)

Isotope	Abundance	Interference	Reference
^{181}Ta	99.988	$^{165}Ho^{16}O^+$	(27)
^{159}Tb	100.	$^{143}Nd^{16}O^+$	(27)(38)
^{122}Te	2.603	$^{106}Pd^{16}O^+$	(32)
^{124}Te	4.816	$^{108}Pd^{16}O^+$	(32)
^{126}Te	18.95	$^{110}Pd^{16}O^+$	(32)
^{128}Te	31.69	$^{96}Ru^{16}O_2^+$	(32)
^{130}Te	33.80	$^{98}Ru^{16}O_2^+$	(32)
^{46}Ti	7.99	$^{32}S^{14}N^+$, $^{14}N^{16}O_2^+$, $^{15}N_2{}^{16}O^+$	(3)(22)(29)
^{47}Ti	7.32	$^{32}S^{14}N^1H^+$, $^{30}Si^{16}O^1H^+$, $^{32}S^{15}N^+$, $^{33}N^{14}N^+$, $^{33}S^{14}N^+$, $^{15}N^{16}O_2^+$, $^{14}N^{16}O_2{}^1H^+$, $^{12}C^{35}Cl^+$, $^{31}P^{16}O^+$	(3)(9)(22)(29)(37)
^{48}Ti	73.98	$^{32}S^{16}O^+$, $^{34}S^{14}N^+$, $^{33}S^{15}N^+$, $^{14}N^{16}O^{18}O^+$, $^{14}N^{17}N_2^+$, $^{12}C_4^+$, $^{36}Ar^{12}C^+$	(3)(18)(19)(22)(29)
^{49}Ti	5.46	$^{32}S^{17}O^+$, $^{32}S^{16}O^1H^+$, $^{35}Cl^{14}N^+$, $^{34}S^{15}N^+$, $^{33}S^{16}O^+$, $^{14}N^{17}O_2{}^1H^+$, $^{14}N^{35}Cl^+$, $^{36}Ar^{13}C^+$, $^{36}Ar^{12}C^1H^+$, $^{12}C^{37}Cl^+$, $^{31}P^{18}O^+$	(3)(22)(29)(37)
^{50}Ti	5.25	$^{32}S^{18}O^+$, $^{32}S^{17}O^1H^+$, $^{36}Ar^{14}N^+$, $^{35}Cl^{15}N^+$, $^{36}S^{14}N^+$, $^{33}S^{17}O^+$ $^{34}S^{16}O^+$, $^1H^{14}N^{35}Cl^+$, $^{34}S^{15}O^1H^+$	(3)(22)(29)
^{203}Tl	29.5	$^{187}Re^{16}O^+$, $^{186}W^{16}O^1H^+$	(3)
^{169}Tm	100.	$^{153}Eu^{16}O^+$	(27)
^{50}V	0.24	$^{34}S^{16}O^+$, $^{36}Ar^{14}N^+$, $^{35}Cl^{15}N^+$, $^{36}S^{14}N^+$, $^{32}S^{18}O^+$, $^{33}S^{17}O^+$	(2)(22)(29)
^{51}V	99.76	$^{34}S^{16}O^1H^+$, $^{35}Cl^{16}O^+$, $^{38}Ar^{13}C^+$, $^{36}Ar^{15}N^+$, $^{36}Ar^{14}N^1H^+$, $^{37}Cl^{14}N^+$, $^{36}S^{15}N^+$, $^{33}S^{18}O^+$, $^{34}S^{17}O^+$	(2)(3)(14)(15)(19)(22) (29)(35)
^{182}W	26.41	$^{166}Er^{16}O^+$	(27)
^{172}Yb	21.9	$^{156}Gd^{16}O^+$	(38)
^{173}Yb	16.13	$^{157}Gd^{16}O^+$	(27)
^{64}Zn	48.89	$^{32}S^{16}O_2^+$, $^{48}Ti^{16}O^+$, $^{31}P^{16}O_2{}^1H^+$, $^{48}Ca^{16}O^+$, $^{32}S_2^+$, $^{31}P^{16}O^{17}O^+$ $^{34}S^{16}O_2^+$, $^{36}Ar^{14}N_2^+$	(2)(9)(11)(15)(19)(22)(34) (35)
^{66}Zn	27.81	$^{50}Ti^{16}O^+$, $^{34}S^{16}O_2^+$, $^{33}S^{16}O_2{}^1H^+$, $^{32}S^{16}O^{18}O^+$, $^{32}S^{17}O_2^+$, $^{33}S^{16}O^{17}O^+$, $^{32}S^{34}S^+$, $^{33}S_2^+$	(9)(11)(15)(22)
^{67}Zn	4.11	$^{35}Cl^{16}O_2^+$, $^{33}S^{34}S^+$, $^{34}S^{16}O_2{}^1H^+$, $^{32}S^{16}O^{18}O^1H^+$, $^{33}S^{34}S^+$, $^{34}S^{16}O^{17}O^+$, $^{33}S^{16}O^{18}O^+$, $^{32}S^{17}O^{18}O^+$, $^{33}S^{17}O_2^+$, $^{35}Cl^{16}O_2^+$	(1)(9)(11)(15)(22) (35)
^{68}Zn	18.57	$^{36}S^{16}O_2^+$, $^{34}S^{16}O^{18}O^+$, $^{40}Ar^{14}N_2^+$, $^{35}Cl^{16}O^{17}O^+$, $^{34}S_2^+$, $^{36}Ar^{32}S^+$, $^{34}S^{17}O_2^+$, $^{33}S^{17}O^{18}O^+$, $^{32}S^{18}O_2^+$, $^{32}S^{36}S^+$	(11)(15)(22) (35)
^{70}Zn	0.62	$^{35}Cl^{35}Cl^+$, $^{40}Ar^{14}N^{16}O^+$, $^{35}Cl^{17}O^{18}O^+$, $^{37}Cl^{16}O^{17}O^+$, $^{34}S^{18}O_2^+$, $^{36}S^{16}O^{18}O^+$, $^{36}S^{17}O_2^+$, $^{34}S^{36}S^+$, $^{36}Ar^{34}S^+$, $^{38}Ar^{32}S^+$	(9)(22)