

Selected Molecules and Ions Ordered by Increasing Number of Total Valence Electrons

	p <sup>+</sup>	e <sup>-</sup>	v.e.			p <sup>+</sup>	e <sup>-</sup>	v.e.	
BH <sub>4</sub> <sup>-</sup>	9	10	8	AX <sub>4</sub>					
CH <sub>4</sub>	10	10	8	AX <sub>4</sub>	PHF <sub>2</sub>	34	34	20	AX <sub>3</sub> E
NH <sub>4</sub> <sup>+</sup>	11	10	8	AX <sub>4</sub>	SF <sub>2</sub>	34	34	20	AX <sub>2</sub> E <sub>2</sub>
NH <sub>3</sub>	10	10	8	AX <sub>3</sub> E	S(CH <sub>3</sub> ) <sub>2</sub>	34	34	20	AX <sub>2</sub> E <sub>2</sub>
H <sub>2</sub> O	10	10	8	AX <sub>2</sub> E <sub>2</sub>					
					SCl <sub>2</sub>	50	50	20	AX <sub>2</sub> E <sub>2</sub>
SiH <sub>4</sub>	18	18	8	AX <sub>4</sub>					
PH <sub>3</sub>	18	18	8	AX <sub>3</sub> E	XeF <sub>2</sub>	72	72	22	AX <sub>2</sub> E <sub>3</sub>
H <sub>2</sub> S	18	18	8	AX <sub>2</sub> E <sub>2</sub>					
HCl	18	18	8	AB	CO <sub>3</sub> <sup>2-</sup>	30	32	24	AX <sub>3</sub>
					NO <sub>3</sub> <sup>-</sup>	31	32	24	AX <sub>3</sub>
CN <sup>-</sup>	13	14	10	AB	BF <sub>3</sub>	32	32	24	AX <sub>3</sub>
CO	14	14	10	AB	CF <sub>2</sub> O	32	32	24	AX <sub>3</sub>
N <sub>2</sub>	14	14	10	AA	NO <sub>2</sub> F	32	32	24	AX <sub>3</sub>
HC <sub>2</sub> H	14	14	10	AX <sub>2</sub>					
HCN	14	14	10	AX <sub>2</sub>	SO <sub>3</sub>	40	40	24	AX <sub>3</sub>
CH <sub>2</sub> CH <sub>2</sub>	16	16	12	AX <sub>3</sub>	CCl <sub>2</sub> O	48	48	24	AX <sub>3</sub>
CH <sub>2</sub> O	16	16	12	AX <sub>3</sub>					
					CHF <sub>3</sub>	34	34	26	AX <sub>4</sub>
CH <sub>3</sub> NH <sub>2</sub>	18	18	14	AX <sub>4</sub> ,AX <sub>3</sub> E	NF <sub>3</sub>	34	34	26	AX <sub>3</sub> E
CH <sub>3</sub> OH	18	18	14	AX <sub>4</sub> ,AX <sub>2</sub> E <sub>2</sub>					
					SiHF <sub>3</sub>	42	42	26	AX <sub>4</sub>
CH <sub>2</sub> CCH <sub>2</sub>	22	22	16	AX <sub>2</sub>	PF <sub>3</sub>	42	42	26	AX <sub>3</sub> E
CH <sub>2</sub> CO	22	22	16	AX <sub>2</sub>					
HNCO	22	22	16	AX <sub>2</sub>	CHCl <sub>3</sub>	58	58	26	AX <sub>4</sub>
CO <sub>2</sub>	22	22	16	AX <sub>2</sub>	NCl <sub>3</sub>	58	58	26	AX <sub>3</sub> E
HN <sub>3</sub>	22	22	16	AX <sub>2</sub> ,AX <sub>2</sub> E					
N <sub>2</sub> O	22	22	16	AX <sub>2</sub>	SiHCl <sub>3</sub>	66	66	26	AX <sub>4</sub>
NO <sub>2</sub> <sup>+</sup>	23	22	16	AX <sub>2</sub>	PCl <sub>3</sub>	66	66	26	AX <sub>3</sub>
HNCS	30	30	16	AX <sub>2</sub> ,AX <sub>2</sub> E	IO <sub>3</sub> <sup>-</sup>	77	78	26	AX <sub>3</sub> E
OCS	30	30	16	AX <sub>2</sub>	XeO <sub>3</sub>	78	78	26	AX <sub>3</sub> E
CS <sub>2</sub>	38	38	16	AX <sub>2</sub>	ClF <sub>3</sub>	44	44	28	AX <sub>3</sub> E <sub>2</sub>
NO <sub>2</sub>	23	23	17	AX <sub>2</sub> E*	BrF <sub>3</sub>	56	56	28	AX <sub>3</sub> E <sub>2</sub>
NO <sub>2</sub> <sup>-</sup>	23	24	18	AX <sub>2</sub> E					
HNO <sub>2</sub>	24	24	18	AX <sub>2</sub> E	BeF <sub>4</sub> <sup>2-</sup>	40	42	32	AX <sub>4</sub>
NOF	24	24	18	AX <sub>2</sub> E	BF <sub>4</sub> <sup>-</sup>	41	42	32	AX <sub>4</sub>
O <sub>3</sub>	24	24	18	AX <sub>2</sub> E	CF <sub>4</sub>	42	42	32	AX <sub>4</sub>
CHFO	24	24	18	AX <sub>3</sub>					
HCO <sub>2</sub> H	24	24	18	AX <sub>3</sub>	ClO <sub>4</sub> <sup>-</sup>	49	50	32	AX <sub>4</sub>
					POF <sub>3</sub>	50	50	32	AX <sub>4</sub>
SO <sub>2</sub>	32	32	18	AX <sub>2</sub> E	SiF <sub>4</sub>	50	50	32	AX <sub>4</sub>
					H <sub>2</sub> SO <sub>4</sub>	50	50	32	AX <sub>4</sub>
NOCl	32	32	18	AX <sub>2</sub> E	H <sub>3</sub> PO <sub>4</sub>	50	50	32	AX <sub>4</sub>
NOBr	50	50	18	AX <sub>2</sub> E	IO <sub>4</sub> <sup>-</sup>	85	86	32	AX <sub>4</sub>
					XeO <sub>4</sub>	86	86	32	AX <sub>4</sub>
CH <sub>2</sub> F <sub>2</sub>	26	26	20	AX <sub>2</sub> E <sub>2</sub>	XeF <sub>4</sub>	90	90	36	AX <sub>4</sub> E <sub>2</sub>
NHF <sub>2</sub>	26	26	20	AX <sub>2</sub> E <sub>2</sub>					
OF <sub>2</sub>	26	26	20	AX <sub>2</sub> E <sub>2</sub>					
CH <sub>3</sub> OCH <sub>3</sub>	26	26	20	AX <sub>2</sub> E <sub>2</sub>					

