

Table of contents

Subvolume II/19D1

1	Introduction	1
1.1	General remarks	1
1.2	Review articles and tables	1
1.3	Arrangement of tables, substances, and parameters	1
1.3.1	Arrangement of chapters and sections	1
1.3.2	Arrangement within the sections of chapters 2 and 3	2
1.3.3	Explanation of the columns of the tables in chapters 2 and 3	2
1.3.4	Error notation	2
1.4	Selection of data	2
1.5	Abbreviations used for experimental methods	3
1.6	Selected fundamental constants and conversion factors	3
1.7	References for 1	4
2	Constants of diamagnetic molecules	see subvolumes II/19a ... c
3	Constants of radicals and ions	5
3.1	Diatomeric radicals and ions (E. TIEMANN)	5
3.1.1	Preliminary remarks	5
3.1.2	The ${}^2\Sigma$ electronic state	8
3.1.2.1	Preliminary remarks	8
3.1.2.2	Data	12
3.1.2.3	ESR spectroscopy with matrix isolation method	52
3.1.2.4	References for 3.1.2.2 and 3.1.2.3	54
3.1.3	The ${}^3\Sigma$ electronic state	57
3.1.3.1	Preliminary remarks	57
3.1.3.2	Data	60
3.1.3.3	References for 3.1.3.2	75
3.1.4	Σ states with high multiplicity	77
3.1.4.1	Preliminary remarks	77
3.1.4.2	Data	79
3.1.4.3	ESR spectroscopy with matrix isolation method	82
3.1.4.4	References for 3.1.4.2 and 3.1.4.3	84

Table of contents

3.1.5	The $^2\Pi$ electronic state	85
3.1.5.1	Preliminary remarks	85
3.1.5.2	Data	92
3.1.5.3	References for 3.1.5.2	155
3.1.6	The $^3\Pi$ electronic state	159
3.1.6.1	Preliminary remarks	159
3.1.6.2	Data	162
3.1.6.3	References for 3.1.6.2	181
3.1.7	The $^1\Delta$ electronic state	182
3.1.7.1	Preliminary remarks	182
3.1.7.2	Data	184
3.1.7.3	References for 3.1.7.2	188
3.1.8	Electronic states with orbital angular momentum $\Lambda \geq 2$ and spin $S \geq 1/2$	189
3.1.8.1	Preliminary remarks	189
3.1.8.2	Data	192
3.1.8.3	ESR spectroscopy with matrix isolation method	208
3.1.8.4	References for 3.1.8.2 and 3.1.8.3	209
3.2	Polyatomic radicals and ions	see subvolume II/19D2
4	Index of substances for volumes II/4, II/6, II/14, and II/19	see subvolume II/19D3

