

Introductory material

1	Introduction (B. STARCK, R. TISCHER, M. WINNEWISSER)	1
2	Constants of diamagnetic molecules	5
2.1	Survey	5
2.2	Diatomic molecules: Rotational and related constants (R. TISCHER)	5
2.3	Linear molecules: Rotational and related constants (J. DEMAISON)	42
2.4	Symmetric top molecules: Rotational and related constants (J. DEMAISON)	59
2.5	Asymmetric top molecules: Rotational and related constants (B. STARCK)	86
2.6	Dipole moments	264
2.6.1	Diatomic molecules (R. TISCHER)	264
2.6.2	Linear and symmetric top molecules (J. DEMAISON)	276
2.6.3	Asymmetric top molecules (B. STARCK)	281
2.7	Quadrupole coupling constants	309
2.7.1	Diatomic molecules (R. TISCHER)	309
2.7.2	Linear and symmetric top molecules (J. DEMAISON, W. HÜTTNER)	324
2.7.3	Asymmetric top molecules (W. HÜTTNER, B. STARCK)	333
2.8	Hindered rotation (B. STARCK)	364
2.9	Magnetic constants	387
2.9.1	Diatomic molecules (R. TISCHER)	387
2.9.2	Linear and symmetric top molecules (W. HÜTTNER)	406
2.9.3	Asymmetric top molecules (W. HÜTTNER)	427
3	Figures (I. BUCK)	453
4	References for 2 and 3 (I. BUCK, B. STARCK, R. TISCHER)	479
5	Constants of radicals	499
5.1	Diatomic radicals (R. TISCHER)	499
5.1.1	Preliminary remarks	499
5.1.2	The ² Sigma electronic state	504
5.1.3	The ³ Sigma electronic state	512
5.1.4	The ¹ Pi electronic state	525
5.1.5	The ² Pi electronic state	528
5.1.6	The ³ Pi electronic state	570
5.1.7	The ¹ Delta electronic state	584
5.2	Triatomic radicals (M. WINNEWISSER)	589
5.2.0	Introduction	589
5.2.1	Linear triatomic radicals possessing a ² Pi electronic ground state	589
5.2.2	Bent triatomic radicals	596
6	Appendix	633
7	Index of substances for volume II/4 and II/6 (B. STARCK)	645