

Bibliography Section

Liquid Column Chromatography

1. REVIEWS AND BOOKS

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2c Relationship between structure and chromatographic behaviour

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2d Measurement of physico-chemical and related values

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3 GENERAL TECHNIQUES

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- 3f. Programmed temperature, pressure, vapors, gradients
- See 3502, 3537, 3739, 4253
- 4 SPECIAL TECHNIQUES
- 4a. Automation
- See 3572, 3767, 3830, 4534, 4635
- 4b Computerization and modelling
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8 SUBSTANCES CONTAINING HETEROCYCLIC OXYGEN

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33. CLINICO-CHEMICAL APPLICATIONS

33a. General papers and reviews

See 3568, 3844

33b. Complex mixtures and profiling (single compounds by cross-reference only)

See 3704, 3732, 3749, 3756, 3784, 3785, 3861, 3866, 3881, 3889, 3949, 3953, 4067

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Gas Chromatography

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10. CARBOHYDRATES

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See also 1408, 1850

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See 1850.

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17. AMINES, AMIDES AND RELATED NITROGEN COMPOUNDS

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See 1969.

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See also 1479, 1733, 1772.

31. PLASTICS AND THEIR INTERMEDIATES

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See also 1411, 1423, 1463, 1475, 1571, 1971.

32. DRUG ANALYSIS

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See also 1819, 1856, 1865, 1882

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- See also 1651.
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See also 1825, 1830, 1831, 1837, 1979

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See also 1663, 1766.

33. CLINICO-CHEMICAL APPLICATIONS

33b. Complex mixtures and profiling (single compounds by cross-reference only)

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See also 1439, 1500, 1522, 1528, 1567, 1595, 1632, 1636, 1709, 1986

34. FOOD ANALYSIS

34a. General papers and reviews

See 1541, 1574, 1585, 1641, 1642, 1655, 1703, 1716, 1725, 1739, 1789, 1954.

34b *Complex mixtures (single compounds by cross-reference only)*

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See also 1504, 1524, 1569, 1570, 1582, 1586, 1596, 1602, 1604, 1606, 1611, 1612, 1617, 1618, 1620, 1621, 1631, 1647, 1649, 1658, 1680, 1693, 1712, 1717, 1720, 1723, 1730, 1734, 1745, 1746, 1749, 1750, 1752, 1754, 1756, 1771, 1775, 1781, 1786, 1787, 1790, 1795, 1797, 1843, 1938.

34c. *Organoleptically important compounds (flavors, odors, volatiles)*

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- 1898 Marsili, R.T. and Miller, N.: Determination of major aroma impact compounds in fermented cucumbers by solid-phase microextraction-gas chromatography-mass spectrometry-olfactometry detection. *J. Chromatogr. Sci.*, 38 (2000) 307-314.
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See also 1502, 1509, 1533, 1672, 1716.

35. ENVIRONMENTAL ANALYSIS

35a. *General papers and reviews*

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See also 1550, 1744.

35b. *Air pollution (complex mixtures; single compounds by cross-reference only)*

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- 35c. *Water pollution (complex mixtures; single compounds by cross-reference only)*
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36. SOME TECHNICAL PRODUCTS AND COMPLEX MIXTURES

36a. Surfactants

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See also 1402, 1406.

36b. Antioxidants and preservatives

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See also 1813, 1814.

36c. Complex mixtures, technical products and unidentified compounds

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- 37 CELLS, CELLULAR PARTICLES AND SUPRAMOLECULAR STRUCTURES
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 38. INORGANIC COMPOUNDS
 - 38b. Anions
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See also 1914.

38d. Volatile inorganic compounds

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See also 1955, 1982, 1983.

39. RADIOACTIVE AND OTHER ISOTOPE COMPOUNDS

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Planar Chromatography

1 REVIEWS AND BOOKS

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- 652 Sherma, J. Planar chromatography *Anal. Chem.*, 72 (2000) 9R-25R - a review with 415 refs.
- 653 Sherma, J.: Thin-layer chromatography in food and agricultural analysis. *J. Chromatogr. A*, 880 (2000) 129-147 - a review with 181 refs.

See also 665, 677, 688, 697, 717, 731, 763, 781, 872, 874, 926, 947.

2 FUNDAMENTALS, THEORY AND GENERAL

2a General

- 654 Liu, B.-q., Duan, J.-c. and Zhang, H.-x.: (Qualitative identification of compounds with thin layer scanning spectrogram). *Hebei Daxue Xuebao, Ziran Kexueban*, 20 (2000) 49-52; C.A., 132 (2000) 342532e.

2b Thermodynamics and theoretical relationships

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2c Relationship between structure and chromatographic behaviour

See 854

2d Measurement of physico-chemical and related values

See 906.

3 GENERAL TECHNIQUES

3a Apparatus and accessories

- 657 Berezkin, V., Malinowska, I., Rozylo, J.K., Makarov, A.B. and Mardanov, R.K.: The possible use of filter paper as a concentrating medium in TLC. *J. Planar Chromatogr.*, 13 (2000) 82-87.

See also 659.

3b Detectors and detection reagents

- 658 Johnson, M.E.: Rapid, simple quantitation in thin-layer chromatography using a flatbed scanner. *J. Chem. Educ.*, 77 (2000) 368-372; C.A., 132 (2000) 236518v.
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3e Preparative scale chromatography

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4 SPECIAL TECHNIQUES

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Gel Electrophoresis

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4i. Other special techniques

See 2634, 2668, 3127.

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11c. Lipids and their constituents

See 2647.

11d. Lipoproteins and their constituents

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20 ENZYMES AND ENZYME ACTIVITY ESTIMATION

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21. PURINES, PYRIMIDINES, NUCLEIC ACIDS AND THEIR CONSTITUENTS

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- ## 32. DRUG ANALYSIS
- ### 32a Drug analysis, general techniques
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- ## 33 CLINICO-CHEMICAL APPLICATIONS
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34. FOOD ANALYSIS

34b. *Complex mixtures (single compounds by cross-reference only)*

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35. ENVIRONMENTAL ANALYSIS

35c. *Water pollution (complex mixtures; single compounds by cross-reference only)*

See 3064.

35d. *Soil pollution (complex mixtures; single compounds by cross-reference only)*

See 3014.

36. SOME TECHNICAL PRODUCTS AND COMPLEX MIXTURES

36c. *Complex mixtures, technical products and unidentified compounds*

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38. INORGANIC COMPOUNDS

38b. *Anions*

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Capillary Electrophoresis and Electrokinetic Chromatography

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2 FUNDAMENTALS, THEORY AND GENERAL

2a General

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See also 1217, 1234, 1270, 1293, 1295, 1308, 1313, 1405.

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See 1248, 1250, 1285, 1292, 1340, 1353, 1431

2c. Relationship between structure and electrophoretic behaviour

See 1230.

2d. Measurement of physico-chemical and related values

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See also 1463.

3. GENERAL TECHNIQUES

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See also 1377.

4. SPECIAL TECHNIQUES

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- 4h. Two dimensional electrophoresis**
- See 1320.

4i. Other special techniques

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5. HYDROCARBONS AND HALOGEN DERIVATIVES

5b. Cyclic hydrocarbons, fullerenes

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See also 1228, 1266, 1268, 1445

7 PHENOLS

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8. SUBSTANCES CONTAINING HETEROCYCLIC OXYGEN

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9. OXO COMPOUNDS, ETHERS, EPOXIDES AND QUINONES

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See also 1476.

10. CARBOHYDRATES

10a. Mono and oligosaccharides. Structural studies

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10b. Polysaccharides, mucopolysaccharides, lipopolysaccharides

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See also 1328

10c. Glycoproteins and their constituents

See 1449.

11. ORGANIC ACIDS AND LIPIDS

11a. Organic acids and simple esters

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See 1382

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24 ORGANIC SULPHUR COMPOUNDS (INCL. GLUCOSINOLATES)

See 1350, 1354.

25 ORGANIC PHOSPHORUS COMPOUNDS (INCL. SUGAR PHOSPHATES)

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26c Coordination compounds

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SUPPLEMENT TO THE
JOURNAL OF CHROMATOGRAPHY A
2000

INDEXES

INTRODUCTION

Presenting the Subject Index for all the four different parts of the Bibliography Section as well as presenting the Index of Types of Compounds Chromatographed has become a tradition in the Journal. The following indexes refer to both volumes of Bibliography published this year (899 and 900). Because the methodological part differs substantially in different techniques, we have retained the subdivision system applied throughout the Bibliography applying the following abbreviations: L = Liquid column chromatography, G = Gas chromatography, P = Planar chromatography, E = Gel electrophoresis, C = Capillary electrophoresis, electrokinetic chromatography and electrochromatography. As indicated, gel electrophoresis (E) and capillary electromigration techniques (C) constitute separate sections. The reason for this has been described in the Introduction published in No 1 Vol. 860. Entries relevant to supercritical fluid chromatography are to be looked for in the section on Gas chromatography. Micellar electrokinetic chromatography, microemulsion electrokinetic chromatography and electrochromatography are to be looked for in the section on Capillary electrophoresis and electrokinetic chromatography. In entries that are heavily populated by chromatographic papers we made a further subdivision into Techniques and Applications. In the Subject Index a selection was made in such entries and an appropriate note was attached. Commonly used sorbents and procedures were not included into the Index. Reviews are clearly indicated.

Prague (Czech Republic)
Brno (Czech Republic)

Z. Deyl and V. Schwarz
J. Janák

Subject Index

Please, note that this Index refers to the entry numbers in the Bibliography Section (J. Chromatogr. A, Vols. 899 and 900). Individual parts of the Bibliography Section (Liquid Column Chromatography, Gas Chromatography, Planar Chromatography, Gel electrophoresis and Capillary electrophoresis and electrokinetic chromatography) are numbered separately.

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Amino-glycosidic antibiotics (gentamycin, kanamycin, lincomycin, neomycin, streptomycin, paromomycin)

L: 749(review), 1930, 3052, 4226

P: 76, 140, 252, 253, 255, 534

Ammonia

L: 3474, 3475

C: 356, 378, 826

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Amphetamines, see Psychostimulants

Anabolism

L: 2166, 2635, 3290, 3291, 3328

G: 718-720, 1244, 1651

Anaesthetics

L: 885, 2068, 2071, 2080, 2083, 2096, 2173, 3209, 3215, 3232, 3238, 3288, 3342, 4353, 4369

G: 388, 393, 1230, 1233, 1235, 1833, 1835, 1836, 1838

P: 98, 901, 906

C: 780, 782

Androstane derivatives, techniques and theory

L: 296, 297, 2634

G: 1103

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G: 714

C: 148

—, —, biological

G: 256-258, 716, 1101, 1102

Anions, inorganic

L: 1057-1075, 2286-2317, 3454-3473, 4607-4640

G: 524-527, 1364-1366, 1979, 1980

P: 128, 649, 965

C: 366-377, 838-848, 1204-1209, 1499-1503

—, —, techniques

L: 53, 71, 149, 150, 1024, 1058, 1061, 1063, 1065, 1066, 1069, 1070, 1072, 1073, 2272, 2286, 2287, 2291, 2292, 2299(review), 2300, 2301, 2305, 2306, 2312, 2314-2316, 2408, 3435-3437, 3454, 3458, 3459, 3461, 3466, 3472, 3473, 3517(review), 3748, 4507, 4512, 4516, 4524, 4527, 4528, 4532, 4564, 4603, 4614, 4619-4623, 4628, 4630(review), 4631, 4632, 4634, 4636-4638, 4640

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C: 44, 336, 362, 370, 374-376, 839, 841-843, 846, 848, 1192, 1200, 1204-1206, 1208, 1212, 1236(review), 1249, 1260, 1294(review), 1486(review), 1502, 1503

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Anorexic compounds, see Appetite depressants

Anthelmintics

L: 901, 1932, 2176, 3047, 3048, 3243, 3244, 3279, 3223, 3335, 4255, 4406

P: 100, 910, 915

C: 1150

Anthocyanes

L: 802, 2536, 3125, 3418

C: 1324, 1440(review)

Anthracycline antibiotics

L: 3064

P: 873

Anthraquinones

L: 1250, 1979, 2195, 2549

P: 550, 946

C: 988

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Antianginal drugs

L: 4355

Antiarrhythmics

L: 858, 2062, 3197, 4337, 4343, 4354, 4355

G: 1226, 1230

C: 777, 1158, 1457

Antiarthritics, see Antirheumatics

Antiasthmatics

L: 896, 928, 1924, 2085, 3293, 4375

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Antibacterials (antiseptics, desinfectants, etc.)

L: 856, 904, 910, 2047, 2052, 2125, 2126, 2137, 3242, 3247, 3249, 3256, 4335, 4403, 4432, 4433, 4440

G: 506, 661, 1258, 1841, 1846

P: 77, 251, 276

C: 1169, 1170, 1178, 1475

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Antibiotics

L: 738-766, 1914-1947, 3047-3085, 4220-4243

P: 76-78, 243-255, 530-537, 864-873

E: 910

C: 274-279, 737-741, 1118-1126, 1431, 1432

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P: 248, 249, 531, 532, 535, 536, 870

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—, other groups

L: 3054, 3055, 3057, 3062, 3068, 3072, 3076, 4236

G: 762

P: 243, 867-869

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Anticoagulants

L: 787, 2170(review), 2183, 3166, 3311, 3315

P: 283(review)

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Anticonvulsants

- L: 876, 895, 898, 2053(review), 2070, 2094, 2170(review), 2996, 3204, 3207, 3212, 3220, 3228, 3232-3234, 3239, 3240, 3288, 4118, 4365, 4367, 4369
- G: 386, 801, 1254, 1840
- P: 49, 269, 283(review), 913
- E: 1973(review)
- C: 782, 786, 793(review), 1164, 1462

Antidepressants

- L: 875, 2074, 2077, 2088, 2097, 2185, 3205, 3213, 3218, 3219, 4372, 4378, 4387, 4469
- G: 799, 1223, 1228, 1232, 1882
- C: 312, 436, 781

Antidiabetics, oral

- L: 930, 1463, 1734

Antiemetics

- L: 2073, 2120, 3283, 4373
- P: 92
- C: 102

Antiepileptics, see Anticonvulsants**Antifertility agents, see Contraceptives****Antifungal antibiotics**

- L: 743, 745, 754, 1451, 3082

Anti glaucoma drugs

- L: 3201

Antihistamines

- L: 861, 886, 888, 928, 2049, 2078, 2085, 2090, 3217, 3236, 4361, 4379, 4423
- G: 1832
- P: 92, 93
- C: 783, 1162

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- L: 2976, 2981, 3251, 3292, 4131, 4133-4135, 4433, 4441
- G: 394
- C: 706

Anti muscular dystrophy drugs

- L: 4130

Antimycotics

- L: 746, 909, 912

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Antioxidants and preservatives

- L: 168, 358, 987, 1009, 1502, 2232, 2233, 2524, 2538, 2610, 3003, 3027, 3416-3420, 3681, 4549(review), 4550-4555
- G: 845, 846, 1205, 1218, 1295, 1327-1329, 1937-1941
- P: 673, 953, 954
- C: 323, 347, 1190, 1488

Antiparasitic drugs

- L: 756, 901, 1927, 3243, 3298, 4402
- G: 1236
- P: 271, 276
- C: 1168, 1170, 1178

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Antiparkinsonics

- L: 884
- C: 787

Antiprotozoal agents, see Antiparasitic drugs**Antipyretics, analgesics**

- L: 87, 876, 879, 881, 883, 889, 890, 894, 1151, 1854, 2067, 2973, 2976, 2981, 3159, 3224, 3231, 3339, 4130, 4131, 4133, 4135, 4323, 4332, 4388, 4451
- P: 5, 266, 268, 576, 625, 904, 905
- C: 102, 308, 706, 1166

Antirheumatics (antiinflammatory, antiarthritics)

- L: 844-855, 1144, 1151, 1223, 2036-2044, 2112, 2115, 2170(review), 2466, 3159-3174, 4311, 4318-4333
- G: 382, 797, 1216, 1217, 1219, 1824
- P: 88-90, 241, 263, 264, 266, 283(review), 568-571, 896
- C: 174, 295, 304, 775, 776, 793(review), 1028, 1155, 1156, 1453-1456

Antiseptics, see Antibacterials**Antitumor antibiotics**

- L: 742, 1914, 3083
- C: 279

Antitussives

- L: 949, 2090, 2117, 2199, 2973, 3339
- G: 805, 819
- P: 5

Antiulcer compounds

- L: 861, 868, 935, 941, 2124, 3187, 3226, 3812, 4383, 4386, 4427, 4430

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Antiviral agents

- L: 752, 906, 908, 911, 918, 925, 939, 940, 1897, 1937, 2099, 2101, 2102, 2127-2129, 2131, 2138, 2143, 2145-2147, 2149, 3250, 3253, 3254, 3257, 3282, 3301, 3302, 3307, 3319, 3321, 4389, 4390, 4392, 4398, 4399, 4401, 4407, 4422, 4431, 4444
- G: 1842
- P: 908, 916
- C: 1464, 1469

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- L: 713, 1887-1889, 3429, 4172-4174, 4176, 4570
- G: 1163-1165, 1403, 1736, 1738
- C: 727, 1193, 1494

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- L: 4616
- G: 1365
- P: 48, 479
- E: 1001

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Barbiturates, *see* Anticonvulsants, Anaesthetics, Hypnotics

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Bee venom, *see* Venoms, other

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Bile acids and alcohols

L: 2644, 3801, 4458

G: 266, 723, 1108

P: 207, 208, 454, 783-785

C: 549, 1004, 1344

Bile pigments

L: 684, 1450-1452

C: 714, 1105, 1106

Biopolymers and their constituents, reviews

G: 1350

C: 1215

—, techniques

L: 1165

C: 878

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Biotin, *see* Vitamins, biotin group

Biphenyl and derivatives

L: 1259, 3117, 3118

G: 175, 177, 179, 181, 189, 500, 551, 636, 637, 642, 644, 645, 647, 648, 650, 1004, 1023, 1126, 1178, 1460, 1481, 1516, 1524, 1547, 1548, 1550, 1551, 1553-1555, 1933, 1934

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C: 282

Bismuth, *see* Cations, inorganic, analytical group I and IIa

Bitter substances

L: 315, 1465

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P: 795

α -Blocking agents, *see* Adrenergic and adrenergic blocking agents

β -Blocking agents, *see* Adrenergic and adrenergic blocking agents

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L: 3018

Boron compounds, inorganic

L: 2309, 3463

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Calcium antagonists

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Capsaicin

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Coal tar and bitumens, hydrocarbons in

G: 866, 1322, 1959, 1972, 1976

P: 120, 146, 330

Cobalamins, *see* Vitamins, B groupCobalt, *see* Cations, inorganic, analytical group III

Coccidiostatics

P: 77

Colchicum alkaloids

L: 673

Composites

G: 1414

Coordination compounds

L: 714-718, 1891-1897, 3019, 3020, 3450, 3511, 3686, 4178-4184, 4513, 4642

P: 71, 241, 523-529, 667, 689, 855-858, 966

E: 907-909

C: 269, 361, 364, 728-735, 753, 1113, 1428

see also Amino acids, metal complexes

Copper, *see* Cations, inorganic, analytical group IIaCoronar vasodilators, *see* Vasodilators

Cosmetics

L: 946, 2605, 3120, 3123, 3129, 3300, 3309, 3313, 3317, 4445, 4459

G: 281, 1049, 1741, 1951, 1968

P: 581

C: 170, 1002, 1468

Coumarins

L: 185, 962, 983, 1290, 1307, 1309, 2712, 3381, 3675, 3684, 3689, 4434, 4479

G: 202, 1049

P: 363, 616

C: 986

Crude oil and petroleum analysis

L: 1014, 1016

G: 128, 146, 156, 160, 191, 192, 194, 495, 497, 505, 508-510, 516, 564, 631, 639, 829, 853, 854, 858, 859, 864, 917, 925, 991, 1006, 1010, 1153, 1290, 1317, 1322, 1331, 1332, 1339, 1341, 1345, 1347, 1353, 1354, 1357, 1361, 1413, 1457, 1537, 1564, 1942, 1944, 1949, 1956, 1961, 1962, 1967

P: 145, 299, 668-670, 955

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Cyanates, *see* Halides and other inorganic halogen compoundsCyanides, *see* Halides and other inorganic halogen compounds

Cyanogenic glycosides

C: 1012

Cytokinins

L: 687, 690

G: 1147

Cytostatics

L: 193, 308, 648, 741, 913-924, 1461, 1856, 2104-2116, 2202, 2767, 3064, 3259-3278, 3352, 3572, 3645, 4408-4421, 4450,

4470, 4476

G: 395-397, 399, 1237, 1238

P: 272-275, 290, 911, 912, 931

E: 51, 829, 912, 2123

C: 103, 279, 1298, 1467, 1489(review)

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Desinfectants, *see* AntibacterialsDetergents, *see* Surfactants, emulsifiers and detergents

Diagnostics

L: 3296, 3304

P: 914, 917

Diazines

P: 214

Dioxans and dioxins

L: 3681

G: 205-208, 644, 673-676, 1053, 1587, 1588

Disulphides

L: 401, 1879, 4161

Disulphones

L: 4159

Diuretics

L: 47, 677, 2054, 2170(review), 3176, 3183, 4334, 4336, 4340, 4345, 4347

G: 643, 1826

P: 582, 920

C: 859

DNA, reviews

L: 1, 2, 662

E: 1, 621, 640, 654, 659, 671, 690, 729, 921, 1611, 1638, 1701, 1705, 1738, 2390, 2475, 3024, 3033, 3038, 3136

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E: 4, 622-624, 630-633, 639, 641, 653, 655, 657, 658, 667, 669, 670, 672, 676, 678, 680, 681, 687, 695, 701, 708, 713, 714, 716-718, 720-725, 733, 742, 747, 748, 935, 938, 989, 1033, 1601, 1631, 1635, 1637, 1640, 1642, 1653-1656, 1658, 1660, 1669, 1670, 1678, 1681-1685, 1696, 1699, 1708, 1709, 1712, 1714, 1719, 1720, 1730, 1731, 1734, 1744, 1929, 1949, 1997, 2004, 2466, 2467, 2469, 2473, 2477, 2478, 2480-2482, 2484, 2485, 2487, 2490, 2491, 2495-2498, 2500, 2503, 2504, 2506, 2508, 2511-2513, 2515-2520, 2523, 2540, 2590, 2994, 3005, 3007-3009, 3014, 3015, 3019-3021, 3029, 3030, 3035-3037, 3039-3041, 3080, 3083

C: 62, 230-235, 237, 240, 242, 243, 247, 287, 406, 408, 499, 502, 507, 659-667, 670-672, 701, 972, 1032, 1075-1078, 1081-1083, 1266, 1382, 1404-1406

—, applications, non-biological

L: 400, 659

P: 501, 828

E: 382, 408, 500, 524, 592, 600, 614, 617, 619, 620, 625, 627, 628, 635, 636, 638, 642-646, 650-652, 661-663, 665, 668, 673-675, 678-680, 683, 685, 688, 692, 693, 699, 700, 703,

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DNA, applications, microorganisms

L: 1826, 1837, 2956

E: 224, 629, 647-649, 655, 656, 660, 663, 664, 666, 677, 679, 684, 686, 689, 691, 694, 696, 702, 709, 710, 712, 715, 720, 723, 726, 734, 735, 737-739, 741, 743, 1634, 1636, 1641, 1657, 1686, 1695, 1707, 1715, 1717, 1718, 1725, 1727, 1729, 1732, 1735, 1736, 1740, 1930, 2464, 2472, 2479, 2483, 2508, 2992, 2996, 3004, 3006, 3016, 3018, 3031

C: 241, 1403

—, —, plants

L: 661

E: 638, 682, 704, 705, 737, 1627, 1675, 1724, 1790, 2492, 2509, 2510, 2524, 2525, 2995, 2998, 3000, 3013, 3017, 3026, 3028

—, —, animal material

L: 1835, 1836

P: 828

E: 382, 626, 634, 637, 642, 643, 669, 675, 692, 697, 698, 713, 717, 719, 725, 727, 731, 732, 736, 744, 861, 1568, 1626, 1628, 1640, 1641, 1650, 1651, 1686, 1693, 1702, 1708, 1722, 1723, 1728, 1733, 1743, 1748, 1961, 1963, 2465, 2468-2471, 2476, 2487, 2505, 2517, 2526, 2997, 2999, 3001-3003, 3011, 3022, 3023, 3027, 3032, 3034, 3072, 3105, 3138

C: 238, 240, 669, 1080

—, chemically modified

L: 4097

G: 166

P: 225, 830

C: 1414

—, structural studies

L: 665-670, 1838, 1839, 2957-2961, 4114, 4115

G: 38, 305

P: 503, 504, 829, 830, 856

E: 635, 643, 653, 655, 661, 686, 729(review), 730, 754-764, 765(review), 766-799, 800(review), 801-806, 807(review), 808(review), 809-814, 815(review), 816-844, 852, 859, 865, 903, 936, 1036, 1550, 1669, 1691, 1697, 1721, 1753, 1762-1844, 1845(review), 1846-1867, 1868(review), 1869-1898, 1910, 1941, 2121, 2290, 2381, 2394, 2404, 2502, 2520, 2524, 2529, 2531-2535, 2536(review), 2537-2547, 2548(review), 2549-2582, 2583(review), 2584, 2587, 2593, 2605, 2608, 2620, 2628, 2994, 3006, 3012, 3035, 3036, 3048-3087, 3103, 3121

C: 245-249, 250(review), 251-254, 420, 663-666, 673-675, 676(review), 677-686, 687(review), 688, 689(review), 690-693, 697, 703(review), 1079(review), 1081, 1084-1092, 1094, 1406-1409, 1410(review), 1411-1414

—, complex mixtures of DNA and RNA and DNA-RNA hybrids

L: 1841

Drug monitoring and pharmacokinetics studies, reviews and books

G: 288, 388, 400, 401, 804, 1145, 1241, 1242, 1247, 1295, 1709, 1848

see also individual categories of drugs

Drugs of abuse (general papers)

L: 891, 953, 956, 957, 2151, 2153, 2154(review), 2162, 2174(review), 2171(review), 3343

G: 122, 391, 405, 409-413, 415, 418, 422, 423, 746, 802, 808-810, 814, 817, 818, 1245, 1819, 1856, 1862, 1865

P: 277, 278(review)

C: 790(review), 794(review), 795

see also individual categories of drugs

—, other

L: 369, 385, 479, 880, 926, 944, 947, 972, 1128, 2119, 2122, 2123, 2130, 2144, 3042, 3281, 3285, 3294, 3295, 3305, 3310, 3318, 3327, 4443

G: 1142, 1243, 1246, 1256, 1868

P: 104

E: 2301

C: 185, 1175, 1176, 1470

—, synthetic, see Pharmaceutical applications and individual types of drugs

Dyes, natural, see Pigments, natural

Dyes synthetic, theory and techniques

L: 790, 793, 1206, 1977

P: 551, 552, 881

C: 756, 757, 1134

—, applications

L: 3120-2123, 3491, 4291, 4293, 4294

G: 172, 734, 1133, 1691, 1971

P: 1, 84, 85, 549, 550, 883, 885

E: 911

C: 285, 286, 1438

see also Food dyes; Textile dyes (including bleaching agents)

E

Ecdysones and other insect hormones of steroid nature

L: 304, 1453-1455, 2645, 2646, 3802, 3803

P: 455

Endorphins, enkephalins and their analogues

L: 390(review), 2727

G: 424, 1248

E: 81(review)

Environmental analysis (general papers)

L: 42, 169, 698, 987-990, 1263, 2213, 2257, 2287, 2368, 2522, 3431, 3439, 3452, 4506, 4546, 4590

G: 1550

P: 116

E: 869

C: 336-339, 358, 1346, 1484

—, reviews and books

L: 712, 2212, 2445

G: 1293, 1294, 1902-1904

P: 947

C: 335, 340, 811

Enzymes (including activity measurement)

L: 551-636, 1710-1810, 2841-2933, 4010-4096

P: 495-497, 821

E: 458-590, 1370-1546, 2309-2389, 2864-2946

C: 217-222, 644-647, 1065, 1066, 1390-1396

Enzymes, general techniques and reviews

L: 1568, 1576, 4010

E: 458(review), 586(review), 1541, 1542

C: 642, 643

—, activity measurement

L: 551, 604, 622, 1401, 2933, 3029, 4095, 4110, 4164

G: 258, 672

P: 705-707

E: 264, 574, 1442

C: 1390

—, complex mixtures and uncompletely defined enzymes

L: 636, 1809, 1810, 4091, 4094-4096

E: 233, 430, 448, 577-585, 586(review), 587-590, 1531-1546, 1574, 1597, 2387, 2945

—, —, structural studies

L: 1808

see also individual categories of enzymes

Ephedra alkaloids

L: 952, 2968, 2973, 4124, 4132, 4359

P: 59, 88, 837

C: 258, 494

Epoxides

G: 211

Epoxy resins

L: 807, 808, 814

Ergot alkaloids

L: 1853

C: 1100

Essential oils

L: 314, 969, 2654, 2655, 3812

G: 269-272, 274-277, 279, 724-728, 1110, 1115-1124, 1126, 1654, 1661, 1662, 1664-1671, 1673-1676

P: 466

Ethers, aliphatic ethers

L: 143, 189, 190, 3689

G: 209-212, 559, 687, 1054, 1339, 1600

—, cyclic ethers

L: 189, 190, 2546, 3637

G: 1590

P: 369

Expectorants

L: 4428

P: 96

Explosives

L: 316, 320, 322, 1467, 1470, 3815, 4614

G: 961, 1127, 1677, 1860

P: 436, 637

C: 317, 925, 1008

F

Ferrocenes

L: 4171

P: 854

Flame retardants

G: 648, 860, 1815

Flavins, see Vitamins, B and other flavins

Flavonoids and γ -pyrone derivatives

L: 173-177, 453, 833, 964, 1287-1298, 1462, 2188, 2512-2526, 3345(review), 3354, 3358, 3364, 3371, 3504, 3632, 3646-3663, 4452, 4457, 4503

G: 203, 1033, 1050

P: 16, 150-154, 345-353, 466, 603, 623, 678-680, 787, 938

C: 118-120, 517, 982-984, 1184, 1322, 1323

Flavours, volatiles, odours, see Organoleptics

Fluorinated antibiotics

L: 762, 4432

Folic acid and other pteridine derivatives

L: 1905, 1908, 1909, 3021, 3029, 4411

E: 1968

Food analysis

L: 164, 178-180, 188, 190, 199, 201, 217, 234, 270, 298, 360, 423, 758, 775, 905, 983-985, 1208, 1259, 1906, 1910, 1961, 1974, 1982, 2207, 2208, 2293, 2505, 2518, 2597, 2676, 2695, 2773, 2964, 2992, 3024, 3030, 3031, 3058, 3241, 3396, 3417, 3419, 3455, 3464, 3645, 3656, 3678, 3691, 3694, 3752, 3757, 3814, 3817, 3818, 3824, 3853, 3862, 4158, 4200, 4237, 4245, 4246, 4287, 4297, 4395-4397, 4503, 4639

G: 176, 195, 198, 213-216, 248, 260-262, 286, 311, 312, 330, 337-339, 342, 347, 358, 361, 365, 432, 435-445, 449, 452, 512, 655, 706, 721, 756, 765, 768, 777, 779, 780, 786-788, 795, 821, 824, 825, 1013, 1015, 1023, 1046, 1078, 1095, 1151, 1171, 1175, 1177, 1184, 1186, 1187, 1189, 1265, 1272-1279, 1281-1283, 1285-1288, 1502, 1504, 1524, 1533, 1569, 1570, 1574, 1582, 1585, 1586, 1596, 1604, 1606, 1609, 1612, 1621, 1641, 1642, 1647, 1649, 1655, 1658, 1672, 1680, 1693, 1703, 1712, 1716, 1717, 1720, 1723, 1725, 1730, 1734, 1739, 1745, 1746, 1749, 1750, 1752, 1754, 1756, 1771, 1775, 1781, 1786, 1787, 1789, 1790, 1795, 1797, 1843, 1889-1896, 1898-1900, 1938, 1954

P: 19, 47, 79, 157, 379, 636, 800, 890

E: 98, 293, 310, 316, 356, 585, 919, 920, 1208, 1985, 2642, 3145

C: 128, 165, 189, 334, 362, 527, 540, 831, 980, 1029, 1060, 1483

—, reviews

L: 982, 2150, 2209, 3543, 4492-4502, 4505

G: 3

P: 653

C: 332, 333, 591, 809, 810, 1296, 1433, 1441, 1480-1482

see also Antioxidants and preservatives; Medicated feeds, analysis of individual food constituents

Food dyes

L: 3128, 4289, 4292

P: 261, 882

C: 539

Free radicals

G: 1513

Fullerenes

L: 158, 159, 2487, 2496, 3614, 3615, 3622-3624

G: 595, 596

P: 329, 667

C: 977

Fumigants

G: 359, 1798

Fungicides

- L: 376, 786, 1970-1975, 3092, 3113, 4261, 4281, 4283
- G: 336, 360-365, 788, 1795-1797, 1799
- P: 45, 81, 238, 260, 548, 879
- C: 753, 754, 1132, 1133

Furans

- L: 186, 187, 947, 1308, 2363, 3681, 3862
- G: 1051, 1589
- P: 734
- C: 1326

Furocoumarins

- L: 1422, 3677

G

Gallium, *see* Cations, inorganic, analytical group III

Gangliosides, *see* Sphingolipids

Gases

- L: 2310
- G: 61, 68, 528, 531, 532, 587, 602, 930, 944, 977, 1019, 1296, 1368, 1370, 1887, 1982-1984

Gibberelins

- L: 689, 2992
- P: 233(review)

Glucosinolates

- L: 1877, 4162
- G: 1714
- C: 722(review), 723, 724

Glycerides, simple

- L: 1428
- G: 250, 252, 1094-1097, 1567, 1643
- P: 177

see also Carboxylic acids, higher fatty acids, simple esters

Glycolipids

- L: 1430, 1436, 2622
- P: 178, 197, 406, 422, 423, 437, 721, 762

see also Phospholipids; Sphingolipids

Glycols and polyols

- L: 817, 2501
- G: 511, 1033, 1240

Glycoproteins and glycopeptides, techniques

- L: 219, 240, 246, 249, 250, 252, 516, 1367, 1368, 1373, 1384(review), 1679, 2577, 2581
- E: 55, 964, 965, 966(review), 968, 969, 985, 1128
- C: 134(review), 135, 530, 531, 1449

—, applications, non-biological (incl. gene manipulation)

- L: 235, 250, 1371, 1374, 1378, 1382, 2586, 2589, 2591, 2592
- P: 240
- E: 42, 46, 51, 56, 397, 957, 961-963, 970, 971, 975, 976, 978, 980, 983, 2023, 2025, 2027, 2028, 2030
- C: 131

—, —, microorganisms

- L: 251, 254, 1370
- P: 393
- E: 39, 42, 45, 52, 115, 443, 961, 967, 972, 973, 981, 986, 2691

—, —, plants

- E: 47, 48, 190, 959, 2031, 2650, 2651
- see also* Lectins

Glycoproteins and glycopeptides, applications, animal material

- L: 238, 247, 516, 525, 548, 870, 1366, 1376, 1379, 1381, 2579, 2582, 2583, 2587, 2588, 3731, 3732, 3940, 3954, 3964

- E: 38, 41, 43, 44(review), 49, 50, 53, 54, 262, 960, 974, 977-979, 983, 2024, 2026, 2027, 2029, 2184, 2652, 2656, 2711, 2743, 2940

- C: 996, 997

—, structure investigation

- L: 248, 1367, 1369, 3708
- P: 701
- E: 40, 958, 2653, 2940
- C: 126, 133

Glycosaminoglycans (including proteoglycans of connective tissue)

- L: 208, 232, 235, 239, 242-244, 1351, 1355, 1359, 1451, 2572-2577, 2584, 3705, 3720, 3725, 4219, 4470

- P: 697(review), 718

- E: 25, 28-30, 32, 33, 35, 37, 1279, 2021, 2022, 2655

- C: 521, 1332

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—, structural studies

- L: 1353, 1356, 1363, 2566, 2580, 2590
- P: 697(review), 699
- E: 35, 2019, 2648
- C: 991, 1328, 1329

see also Carbohydrates, derivatives, amino sugars

Growth factors

- L: 387, 389, 398, 407, 2728, 4219
- G: 235, 630, 1066, 1146, 1147, 1694, 1708
- E: 85-87, 2046

see also Pituitary hormones and proteins; Gibberelins

Gold, *see* Platinum metals and gold

Guanidine and guanidine derivatives

- L: 3838
- P: 475

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Haemostatics

- L: 938, 942, 945, 2142

Halides and other inorganic halogen-containing compounds (including cyanides and cyanates)

- L: 1064, 1067, 1068, 1490(review), 2288, 2290, 2294, 2298, 2307, 2310, 3461, 3465, 3468, 3470, 4508, 4520, 4521, 4607, 4609, 4611, 4624, 4627

- G: 524, 534, 584, 589, 1355, 1365, 1367, 1816, 1908, 1975, 1979

- P: 129, 947(review)

- C: 373, 840

Hallucinogens (including cannabis constituents)

- L: 878, 891, 2091(review)
- G: 415, 818, 1857, 1859

Halogen derivatives of hydrocarbons, *see* Hydrocarbons, halogen derivatives

Halogens

- L: 1062, 2290, 2302, 2303, 2307, 3455, 3456, 4530, 4575, 4584, 4615, 4617, 4626, 4635
- G: 1987

- P 649
E. 2629, 2630
C: 372, 377
- Harman alkaloids
L: 2982
- Herbicides, general techniques
L: 779, 781, 783, 785, 1967, 3096, 3105-3107, 4249, 4264, 4266, 4267, 4269, 4270, 4273, 4275, 4277, 4279, 4280, 4506
G 357, 1789
P 546, 547, 875, 877, 878
C 283, 284, 748, 749, 1433(review), 1485
- , carboxylic acid, anilides and related compounds
L 1962, 3108, 3109, 4262, 4268, 4271
G: 358, 364, 785, 1191, 1774, 1775, 1794
C 747, 1131
- , triazine derivatives
L 784, 1961, 1966, 3110, 3112, 4274, 4276, 4278
G 354, 356, 784, 1192-1194, 1198, 1781, 1782, 1785, 1930
C: 752, 1129, 1130
- , urea derivatives
L 780, 782, 1960, 1963, 1965, 1969, 3111, 4263, 4265, 4272
G 357, 1199, 1779
P 260
C. 281, 750-752
- Heterocyclics, nitrogen (other)
L 693, 695, 973, 1867, 1869, 1871, 1968, 3818, 4158
G. 485, 750, 800, 1141, 1145, 1148, 1395, 1709-1712, 1787, 1957
P: 65, 66, 68
E 1967
C 1431
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- Heterocyclics, oxygen (other)
L: 1290, 3678, 3683, 3685
G: 204, 485, 671, 683, 1052, 1584, 1852, 1889, 1923
see also individual groups of oxygen containing heterocyclics
- , sulphur (other)
L: 698, 1873
G 313, 485, 516, 800, 1152, 1332, 1721, 1957
P 519, 520
see also Thiazoles and isothiazoles, Thiophenes
- Histamine and related substances
L 336, 4156
G 1150
C 555, 720, 1109
see also Imidazoles
- Hormones peptidic and proteinous (including synthetic analogues)
L 380, 389, 398, 1526, 1535, 1540, 1555, 1556, 2730, 3881, 3897, 3900, 3903
E 79(review), 85-87, 1012
C 168, 172
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- , synthesis and structural studies
L: 1532
- Humic acids
L 794, 801, 1003, 1984, 2318, 3127, 4278
G 1070, 1319, 1624, 1924
E 1970, 2623
C. 758, 759(review), 761, 763, 1135-1138
- Hydrazines, hydrazides and hydrazones
G. 1195, 1348
P: 216, 477
- Hydrocarbons
L 153-160, 1255-1271, 2486-2499, 3614-3627
G 152-194, 627-650, 1004-1032, 1522-1564
P. 15, 144-146, 329-335, 667-670
C: 511-513, 977, 1318
- , theory and techniques
G: 916, 962
- , aliphatic
L: 1245, 2486
G: 30, 79, 152-156, 458, 508, 553, 628-630, 898, 913, 983, 1004-1009, 1495, 1522-1529, 1561, 1886, 1944
C: 1186
- , cyclic
L. 19, 153-156, 170, 985, 1004, 1136, 1185, 1256-1268, 1334, 2214, 2336, 2364, 2412, 2488-2495, 2497, 2499, 3385, 3405, 3533, 3535, 3536, 3616-3621, 3625-3627
G: 13, 35, 108, 157-168, 170, 171, 412, 426, 467, 475, 485, 632-639, 906, 984, 1000, 1010-1019, 1307, 1310, 1338, 1358, 1477, 1516, 1530-1546, 1550, 1561, 1807, 1910, 1933, 1934, 1957, 1970
P: 15, 143, 144, 300, 330-335, 541, 691
C 455, 459, 511, 512, 901, 922, 950, 1186, 1228, 1266, 1268, 1318, 1445
- , halogen derivatives
L 160, 1259, 1269, 1270, 1273, 2364, 2498, 3385
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- L: 19, 27, 47, 165-172, 323, 883, 969, 1256, 1278-1283, 1285, 1286, 1984, 2031, 2175, 2218, 2233, 2364, 2502, 2504-2509, 2511, 2520, 2524, 3374, 3415, 3416, 3420, 3497, 3533, 3631-3645, 3761, 3989, 4294, 4553
- G: 199-201, 282, 370, 504, 651, 660-668, 825, 863, 1039-1042, 1044-1048, 1078, 1335, 1574, 1576, 1578, 1579, 1581, 1582, 1590, 1796
- P: 9, 148, 149, 289, 336-338, 340-344, 671-677, 694, 711, 714, 738, 928, 935
- C: 116, 117, 136, 514, 515, 979-981, 1228, 1273, 1320

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- G: 515, 1008, 1034, 1263, 1508, 1572, 1622
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- G: 1644
- P: 34, 36-38, 41, 174, 177, 182, 183, 186, 187, 195, 197-200, 402, 406, 408, 415, 428, 437-439, 584, 742, 758, 764, 767, 773, 774, 852, 853
- E: 988, 1988
- C: 144, 1002
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- G: 1154

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- L: 1059, 1075, 2304, 2311, 4612, 4639
- G: 755, 1154, 1788
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- E: 3147(review), 3148(review)
- C: 368, 844

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- L: 710(review)
- G: 1788
- C: 268(review)

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- L: 202, 208, 403, 640, 651, 708, 709, 1499, 1553, 1815, 1882, 1884, 2536, 2618, 3008-3012, 3289, 3305, 3318, 3586, 3621, 3780, 4164-4169
- G: 315, 752-755, 1155
- P: 183, 220, 240, 500, 521, 588, 764, 767, 773, 774, 808, 850-853
- E: 9, 300, 1002, 1041, 1051, 1988
- C: 144, 267, 614, 726, 1033, 1070, 1427
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- L: 691, 721, 795, 796, 797(review), 798-800, 802-805, 1898, 1906, 1980-1983, 1985, 1986, 2190, 3038, 3041, 3125, 3126, 3129, 4150, 4295-4303, 4487
- G: 295, 850
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- C: 1439, 1440(review), 1441(review)

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- L: 407, 408, 539, 1530, 4559
- E: 1007
- C: 577

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- L: 2159, 3345
- P: 620

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- L: 256, 304, 312, 399, 453, 961-980, 984, 1055, 1278, 1292, 1332, 1394, 1454, 1461, 1517, 1907, 2104, 2182-2205, 2519, 2524, 2539, 2601, 2607, 2610, 2611, 2629, 2647-2651, 2981, 3222, 3276, 3292, 3344, 3346-3393, 3504, 3654, 3655, 3663, 3675, 3677, 3684, 3744, 3804, 3808, 3811, 3829, 4122, 4123, 4130, 4233, 4451-4491, 4552
- G: 427, 429, 850, 1036, 1149, 1260, 1663, 1666, 1766, 1851, 1871, 1872
- P: 96, 101-115, 288-298, 336, 379, 569, 594, 596-619, 621-635, 695, 833, 929-946
- E: 2158, 2624
- C: 321-328, 706, 798(review), 799-803, 826, 984, 1005, 1066, 1102, 1184, 1345, 1475-1477

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- L: 2024, 3131, 3137
- G: 490, 491, 513, 1308, 1411, 1814

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- L: 806-929, 1988-2024, 3130-3138, 4304-4306
- G: 1801-1818
- P: 262, 562, 563, 892-894
- E: 1971, 1972
- C: 287-289, 762-764, 1139, 1140, 1442, 1443

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- L: 820
- G: 367
- C: 1442

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- L: 54, 187, 809, 810, 812, 813, 815, 819, 821-823, 825-827, 1161, 1240, 1584, 1988, 1990, 1992-1996, 1999, 2001, 2004-2013, 2016-2019, 2021, 2023, 2327, 2369, 3136, 3138, 3604
- G: 368, 373, 496, 1463, 1815
- P: 139, 893, 894
- E: 1972
- C: 287-289, 662, 762, 1139, 1140
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- L: 1025, 1032, 1035, 1037, 1050, 2255, 2314, 3427, 3442
- C: 731

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- L: 3132, 3133

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- L: 1918, 1936

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- P: 77

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- L: 4306
- G: 1207, 1808

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- L: 671, 1840, 2179, 2962, 4116
- E: 248, 600, 602, 634, 637, 644, 645, 647-649, 679, 715, 719, 803, 821, 839, 842, 845-855, 856(review), 857-868, 870-899, 900(review), 901-903, 915-918, 1537, 1564, 1592, 1597, 1645, 1666, 1784, 1787, 1824, 1837, 1848, 1861, 1862, 1874, 1880, 1893, 1899-1914, 1915(review), 1916-1966, 1974, 1979-1984, 2003, 2193, 2220, 2345, 2396, 2402, 2407, 2410,

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- C: 1(review), 229, 237, 249, 659, 665, 672, 688, 694(review), 695-702, 703(review), 704, 705, 808, 1093-1097, 1239, 1404, 1415-1417
- Polynucleotides**, *see* Oligo- and polynucleotides
- Polyolefins**
- L: 811, 1991, 2002, 2003, 2014, 2015, 2020, 2022
- G: 369, 377, 490, 491, 1202, 1205, 1334, 1802, 1803, 1806, 1813
- Polyoxyethylene and related polymers (inclusive pyrolysis products)**
- L: 3134
- G: 274
- Polysaccharides and their constituents**
- L: 229-231, 233, 234, 236, 241, 1345-1348, 1350, 1352, 1354, 1361, 1362, 1364, 1365, 2190, 2199, 2569-2571, 2578, 2765, 3718, 3721-3724, 3726, 3727, 4417
- P: 166, 390-392, 713, 719, 720
- E: 36, 952, 953, 955, 956, 2649
- C: 132, 528, 994, 1331
- see also* Starch components
- , structural studies
- L: 237, 1358, 2199, 3716, 3721
- G: 209, 614, 918, 1209
- P: 386, 702, 704, 713, 719, 720
- C: 133, 1328
- Polyurethanes**, *see* Urethanes and polyurethanes
- Polyvinylalcohol**
- P: 562
- Porphyrins and metalloporphyrins**
- L: 681, 682, 1861, 2984(review), 2985, 4147, 4149
- P: 63, 842
- C: 1104, 1422, 1423
- Potassium**, *see* Alkali metals
- Pregnane derivatives, techniques**
- L: 296, 300, 2039, 2045, 2166, 2169(review), 2631-2633, 2638, 3290, 3291, 3789-3793
- G: 256
- P: 447
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- L: 321
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- L: 273-275, 1425, 2525, 2595, 2613, 2614, 3770, 3771
- G: 703-705, 711, 1092, 1093, 1634-1638
- P: 31, 350, 741
- E: 987
- C: 140
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- L: 497, 498, 1653, 1654, 3961-3963
- E: 136, 318-328, 376, 971, 1054, 1156, 1225-1232, 1616, 2211, 2212, 2213(review), 2214, 2215, 2304, 2374, 2406, 2420, 2712, 2795-2800, 2806, 2953
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- L: 423-550, 1564-1709, 2747-2840, 3913-4009
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- C: 178-216, 592-641, 1041-1064, 1372-1389
- , reviews and books
- L: 435, 489, 662, 1581, 1583, 3144, 3482, 3922, 3931, 4497, 4501
- E: 102, 111, 184, 201, 215, 236, 274, 429, 439, 654, 690, 930, 1026, 1053, 1131, 2007, 2010-2013, 2054, 2056, 2061, 2063, 2066, 2067, 2052, 2053, 2055, 2057-2060, 2062, 2064, 2065, 2068-2074, 2083, 2102, 2108, 2109, 2113, 2117, 2129, 2152, 2161, 2177, 2198, 2213, 2241, 2249, 2262, 2632, 2633, 2640, 2686, 2687, 2699
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- C: 10, 25, 31, 59, 79, 115, 177, 179-184, 290-292, 331, 387, 448, 510, 580, 593, 594, 596-602, 856, 930, 965, 1032, 1041, 1043-1050, 1292, 1309, 1371-1374, 1412
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- , —, sequence and structural studies
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- , cells, subcellular particles and viruses (including ribosomal proteins)
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- L 427, 441, 444-446, 449, 458, 460, 518, 544, 552, 1382, 1559, 1598, 1600, 1603-1613, 1617, 1621, 1679, 1685, 1696, 1706, 1720, 1775, 2766-2768, 2783, 2839, 2874, 3577, 3880
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 - L 38, 447-460, 1610, 1614-1625, 1655, 1668, 1769, 2766, 2769-2779, 2793, 2797, 2818, 2831, 2901, 2921, 2933, 3932-3943, 3980-3986, 3996, 4009
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L: 195, 311, 961, 1316, 1318, 1319, 1979, 2551, 3359, 3646
G: 1547
P: 15, 158, 366, 605
C: 1327, 1476

R

Radioactive and other isotope compounds

L 52, 1029, 1037, 1038, 1046, 1077-1079, 2248, 2281, 2285, 2291, 2318, 2319, 2936, 3476, 3477, 4578, 4641-4643

G: 1628

P: 397, 528, 573, 647, 857, 919, 958, 964, 966-968

E 905, 2629

C: 378, 1212

Radiopharmaceuticals

P 95, 583, 914

C: 1466

Radioprotective agents

L 3284

Rare earths

L 1027, 1031, 2244, 2261, 3441, 3444, 3445, 4567, 4576, 4585, 4599

C: 1498

Rauwolfia alkaloids

L 4126

P: 836

Repellents, *see* Larvicides, insecticides

Resins, alkyl

G: 1816

—, phenolic

L 821

P: 563

—, polyester

L 3135

G 1203, 1571, 1805

—, polyethylene and polypropylene glycols

L: 817, 3409, 4304

G: 1817

E: 1971

—, poly(vinyl acetate)

G 1211

—, poly(vinyl chloride)

G: 1204, 1211

—, poly(vinyl fluoride)

G: 1201

see also Acrylic resins, Epoxy resins, Polyolefins; Rubber (natural and synthetic); Styrene polymers

RNA, reviews

L 1, 2

E 1, 605, 1611, 2390, 3136

C: 1274

—, techniques

L 1824, 2934, 4112

E: 602, 616, 724, 742, 1559, 1566, 1585, 1601, 2400, 2403, 2426, 2452, 2949, 2950, 2952, 2972, 3029

C: 31, 229, 287, 1074

—, applications, non-biological applications (*in vitro* processing)

L: 1825, 3611

E 500, 594, 596-601, 603, 604, 606-608, 611, 614, 615, 617, 863, 886, 1334, 1354, 1554, 1558, 1560, 1562-1565, 1567, 1570-1573, 1575-1577, 1580, 1581, 1585, 1587, 1589, 1591, 1592, 1594, 1596, 1598, 1600, 1602-1606, 1608-1610, 1612-1625, 1671, 1851, 1928, 1948, 1963, 2045, 2140, 2222, 2315, 2396, 2398, 2399, 2401, 2402, 2404-2417, 2419, 2420, 2422, 2425, 2427, 2429-2434, 2436, 2437, 2439, 2440, 2443, 2444,

2447-2450, 2456-2460, 2462, 2463, 2488, 2493, 2554, 2555, 2580, 2585, 2600, 2613, 2827, 2844, 2951, 2953-2955, 2959-2967, 2969, 2971, 2974, 2976, 2981-2985, 2987-2989, 2991, 3125

C: 502, 658

RNA, applications, microorganisms

L: 451

E: 194, 595, 610, 612, 613, 618, 1561, 1582, 1584, 1593, 1595, 2397, 2418, 2435, 2445, 2446, 2875, 2956, 2973, 2980, 3130

—, —, plants

E: 1553, 1556, 1557, 1926, 1927, 2438, 2998, 3028

—, —, animal material

E: 594, 609, 617, 1568, 1569, 1574, 1578, 1579, 1581, 1583, 1586, 1588, 1590, 1597, 1599, 1607, 1608, 1614, 1626, 1928, 1963, 2335, 2406, 2415, 2417, 2420, 2423-2425, 2427, 2428, 2437, 2441, 2442, 2450, 2451, 2453-2455, 2457, 2461, 2476, 2877, 2934, 2957-2959, 2968, 2970, 2971, 2975, 2977-2979, 2985, 2986, 2990, 3065

—, —, structural studies

P: 502

E: 749-751, 752(review), 753, 1559, 1615, 1751-1761, 1909, 2333, 2433, 2527-2530, 2593, 2605, 2628, 2949, 3042-3047

C: 244, 699, 1085, 1094

Rodenticides

L 787

Rubber natural and synthetic (inclusive pyrolysis products)

L 2003, 2014, 2022

G: 370, 378, 790, 1206

Rubidium, *see* Alkali metals

S

Saponins and sapogenins

L 308, 920, 963, 966, 968, 1457, 1458, 1460, 2182, 2192, 2201, 2647-2649, 3804, 3805, 3808, 4454, 4490

G: 1109

P: 105, 106, 111, 115, 291, 456-459, 599, 604, 607, 626, 627, 632, 788, 932, 944

E: 2624

C: 327, 803

Selenium compounds, inorganic, *see* Cations, inorganic, analytical group IIb

—, organic

L 702, 1881, 2251, 2706, 3451, 4163, 4175, 4600

G 303, 326, 327

C: 727

Sexual attractants, *see* PheromonesSialic acids, *see* Glycosaminoglycans

Silicium compounds, inorganic

L: 2295, 3462

—, organic

L: 1890, 4177

G: 27, 461, 892, 980, 1801

Silver, *see* Cations, inorganic, analytical group I and IIaSnake venoms, *see* Venoms, snakeSodium, *see* Alkali metal

Softeners

G: 786

Soil pollution

- L: 160, 779, 784, 785, 1004, 1075, 1955, 1960, 1961, 1965, 2223, 2224, 2974, 3013, 3095, 3405, 3620, 4184, 4269, 4276, 4283, 4534-4536, 4543, 4548, 4565
 - G: 138, 165, 185, 187, 199, 290, 323, 357, 483-485, 633, 635, 639, 642, 664, 753, 829, 830, 844, 984, 1032, 1041, 1070, 1160, 1168, 1179, 1186, 1198, 1204, 1322-1324, 1433, 1495, 1530, 1534, 1536, 1538, 1555, 1561, 1588, 1724, 1728, 1736, 1773, 1775, 1780, 1917, 1933-1935
 - P: 70, 117, 118, 334, 539, 541, 637, 638, 878
 - E: 922
 - C: 284, 751, 969, 1008, 1255, 1268
- see also individual polluting compounds

Spasmolytics

- G: 1829

Specific binding proteins (receptors)

- L: 147, 524-542, 547, 1444, 1652, 1685-1696, 1740, 1742, 2576, 2774, 2780, 2818, 2821-2834, 2996, 3731, 3886, 3947, 3987-3998, 4219, 4254
- E: 53, 258, 389-423, 513, 743, 962, 995, 1001, 1034, 1084, 1294-1339, 1356, 1424, 1564, 1577, 1590, 1600, 2076, 2093, 2121, 2211, 2223, 2259, 2269-2294, 2303, 2408, 2461, 2476, 2657, 2663, 2681, 2707, 2721, 2817, 2829, 2838-2847
- C: 200, 586, 635-639, 1382

—, structural studies

- L: 2742, 2744
- E: 1308, 1317, 1330, 2076

Sphingolipids (sulfatides, gangliosides, ceramides, cerebrosides)

- L: 209, 276, 1431, 1434, 1436, 1442, 2615, 2621, 3776, 3778, 3781, 3783
- G: 1100
- P: 32, 35, 179, 180, 182, 189-191, 196, 204, 403, 405, 407, 413, 417, 419, 421, 425-427, 429, 433, 434, 750, 754, 758, 766, 769
- C: 1341

Stabilizers, see Plasticizers and stabilizers

Starch components

- L: 1349, 1357, 1360
 - G: 1209, 1850
 - P: 167
 - E: 2020
 - C: 529
- see also Polysaccharides

Steroid alkaloids

- L: 1851
- P: 229
- C: 547

Steroids

- L: 292-304, 1445-1455, 2628-2646, 3789-3803
- G: 255-266, 711-723, 1101-1109, 1645-1651
- P: 205-208, 443-455, 776-786
- E: 2043, 2044
- C: 146-149, 577-549, 1003, 1004, 1342-1344

—, reviews and books

- L: 293

—, general techniques and theory

- L: 292, 294, 2628-2630
- G: 255, 256, 711
- P: 6, 443-445
- C: 146, 147, 1342

see also Androstane derivatives; Oestrogens; Pregnane derivatives; Sterols

Sterols, reviews

- G: 264

—, techniques

- L: 285, 302, 1449, 3793, 4458
- G: 261, 1649
- P: 206, 781
- E: 2043, 2044
- C: 1343

—, applications, non-biological

- L: 3799
- G: 1646
- P: 205, 207, 453, 791

—, —, biological

- L: 303, 1448, 2193, 2616, 2627, 2642, 2643, 3785, 3788, 3800, 3806
- G: 260, 262, 263, 265, 266, 438, 720-723, 1107, 1647, 1648, 1892
- P: 197, 779, 780, 782
- E: 993

Stimulants, see Psychostimulants

Strontium, see Alkaline earths

Strychnine group

- L: 2963, 4122
- G: 1706
- P: 99, 107
- C: 255, 256

Styrene polymers (inclusive pyrolysis products)

- L: 1989, 1997, 1998, 2571, 4305
- G: 366, 371, 372, 376, 792, 1351, 1802, 1809, 1818
- P: 262, 892, 920
- C: 288, 763

Subcellular particles

- L: 4560
- C: 351

Sulphatides, see Sphingolipids

Sulphides (thioethers) and polysulphides

- G: 109, 311, 312, 314, 446, 482, 754, 1151, 1458, 1715, 1717, 1719, 1720

Sulphonamides

- L: 833, 902, 903, 905, 907, 2103, 2365, 3241, 3242, 3245, 3255, 3256, 4395, 4404
- G: 1844
- P: 7, 536, 909
- C: 315

Sulphonate esters

- G: 489

Sulphones

- L: 699
- G: 488, 1325

Sulphoxides

- G: 300

Sulphur compounds, inorganic

- L: 1071, 1075, 2293, 2289, 2308, 2313, 2317, 3465, 3467, 3471, 4520, 4529, 4608, 4610, 4613, 4633
- G: 482, 873, 875, 877
- C: 1207

—, organic, techniques

- L: 705, 1515, 1881, 1874, 1875, 1960, 3003, 3007, 4635

- G: 516, 873, 1716-1718
 P: 50, 588
 E 906(review)
 C 721
- Sulphur compounds, organic, acids and derivatives
 L 701, 703, 704, 706, 1878, 1880, 2214, 3001, 3002, 3005, 4523, 4543, 4544, 4546-4548
 P: 239, 477, 518, 892
 C 266, 1112
 see also Heterocyclics, sulphur
- Sulphur, elemental
 L: 1060, 3457, 4635
 G. 1955
- Sunburn preventives
 L: 2234
- Surfactants, emulsifiers and detergents
 L 994, 1005-1008, 1437, 2225-2231, 3406-3415, 3526, 4537-4548
 G 234, 380, 486-489, 657, 1325, 1326, 1402, 1406, 1936
 P 119, 301, 639, 640, 951, 952
 C 345, 346, 812(review), 813, 1187-1189, 1487
- Suspensions, various
 L 1240, 1241, 2239, 2240, 2241(review), 2283, 3423, 4559, 4561, 4562
 E: 924-928, 1986, 1987(review), 1989, 1991, 1992, 2014
 C 348, 354, 817-819, 1191
- Sweeteners, artificial
 L 2132, 2139, 2148, 3286
 G 512
- Sympathomimetics, see Adrenergic and adrenergic blocking agents

T

- Tannins (and catechins)
 L: 2210, 2538, 2964, 3676(review), 3680
 G 1931
 P: 339, 364, 372
 C 1325
- Tantalum, see Cations, inorganic analytical group III
- Technetium, see Cations, inorganic, analytical group IIb
- Tellurium, see Cations, inorganic, analytical group IIb
- Terpenes
 L 309-315, 1461-1465, 2650-2655, 3806-3812
 G 267-279, 724-728, 1110-1126, 1652-1676
 P: 43, 211, 212, 461-466, 791-795
 C 550, 1005, 1006, 1345
- , general techniques
 L 3809(review), 3810
 G 1185, 1652
- , applications
 L 309-313, 1294, 1461, 1462, 1464, 2524, 2651-2653, 2966, 3374, 3806-3808, 3811, 4140, 4141
 G 267, 428, 566, 1110, 1113, 1114, 1116, 1117, 1655, 1660, 1672, 1873, 1947, 1949
 P: 211, 212, 461, 462, 464, 465, 671, 791-794
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- , acids
 P 43
- C: 1005, 1345
- Terpenes, alcohols
 L: 1272, 1274, 1462, 1463
 G: 268, 1111, 1112, 1115, 1125, 1259, 1653, 1656, 1657, 1871, 1874
 P: 463
- , resins
 G: 1849, 1950
- Tetracyclines
 L: 758, 763, 1923, 1926, 3073, 3085, 4238
 P 243, 247
- Tetrazoles
 P: 234
- Textile dyes (including bleaching agents)
 L: 791, 1978, 1979, 4288
 P 884, 885
- Thallium, see Cations, inorganic, analytical group I and IIa
- Thiamine, see Vitamins, B
- Thiazoles, isothiazoles and thiazolones
 P 238
- Thioglucosides
 L 697
- Thiols
 L 700, 707, 2604, 3004, 3006, 4111, 4160
 G: 1458
 C: 559, 725, 1350, 1354
- Thiophenes
 G: 385, 751, 921, 1717
- Thorium, see Cations, inorganic, analytical group III
- Thyroglobulins and related proteins
 L: 541, 1536, 1541
 E: 1008, 2662
- , structural studies
 E: 1021
- Tin, inorganic, see Cations, inorganic, analytical group III
- , organic
 L: 712(review), 3013-3015, 3017
 G 316, 323-325, 757, 759, 760, 1156, 1159, 1160, 1162, 1727, 1729-1731, 1733-1735, 1748
- Titanium, see Cations, inorganic, analytical group III
- Toad venoms, see Venoms, other
- Tobacco alkaloids
 L: 672, 674, 676, 1845, 1846, 1860, 1872, 2967, 2972, 2974, 4120(review), 4139
- Tocopherols, see Vitamins, E
- Toxicological (and forensic) analysis, reviews and books
 L: 959, 2091, 2150, 2151, 2154, 2156, 2158, 2159, 2169-2172, 2174, 2181, 3332, 3338, 4471
 P: 278, 279, 283, 284, 287, 591, 926
 E: 1977
 C: 790, 791, 793, 794, 796, 797, 798
- , general techniques
 L: 950, 993, 2165, 2166, 3331, 3334
 G: 205, 352, 404, 405, 407, 409, 412, 416, 418, 421, 422, 426, 563, 612, 852, 1016
 P: 925
 E: 3037, 3137
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- , applications
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- G: 122, 168, 182, 200, 280, 341, 384, 406, 410, 413-415, 417, 419, 420, 423-425, 507, 511, 644, 653, 693, 806, 807, 809-814, 816, 817, 1021, 1067, 1068, 1142, 1143, 1195, 1197, 1225, 1243, 1245, 1247, 1249-1254, 1256, 1257, 1314, 1341, 1552, 1581, 1677, 1706, 1727, 1782, 1794, 1820, 1825, 1830, 1831, 1837, 1853-1862, 1864-1868, 1870, 1891, 1979
- P: 98, 155, 236, 277, 470, 584-590, 592-595, 790, 818, 883, 921-923, 928
- E: 365, 451, 773, 816, 1100, 1448, 1642, 1784, 1974-1976, 2492, 2518, 3057
- C: 257, 261, 317, 318, 480, 792, 1182, 1183, 1208
- see also Proteins of blood, serum and blood cells
- Toxins (non-proteinous or unidentified)
- L: 961, 2160, 3341, 3332(review), 3334, 3338(review)
- P: 236, 281, 285, 589, 924, 927
- E: 1975, 1976
- C: 1474
- see also Aflatoxins; Mycotoxins
- , proteinous
- L: 413, 514, 1595
- E: 199, 207, 451, 1048, 2743
- , —, structural studies
- L: 1595
- see also Proteins of glands and gland products; Venoms, individual enzyme types
- Tranquilizers (anxiolytics)
- L: 895, 2072, 2074, 2097, 2178, 2996, 3207, 3208, 3210, 3212, 3216, 3228, 3237, 4363, 4366, 4370
- G: 387, 392, 398, 669, 804, 1231
- P: 267, 903, 907
- C: 1164, 1462, 1463
- Transferases, transferring one atom groups (methyl-, hydroxy-, formyl-, carbonyl-, carbamoyl-, amidine) and related transferases (E.C. 2.1.-.)
- L: 1735, 2869, 4030
- E: 500, 1412, 1416, 2326, 2883
- , —, structural studies
- G: 1132
- , transferring acyl- and aminoacyl groups (E.C. 2.3.-.)
- L: 578, 580, 4032, 4038
- E: 499, 1410, 1417, 1593, 2168, 2322, 2324, 2868
- , transferring glycosyl residues (hexosyl and pentosyl transferases) (E.C. 2.4.-.)
- L: 581, 630, 1738, 4034, 4036
- E: 1411, 1413, 1414, 2321, 2325, 2882
- C: 220, 644
- , transferring alkyl or aryl groups (E.C. 2.5.-.)
- L: 577, 579, 584, 1737, 2868, 2871, 2877, 2878
- P: 471
- E: 503, 1415, 1954
- , transferring nitrogenous groups (E.C. 2.6.-.)
- L: 2874, 2872, 4033
- , transferring phosphorus containing groups (E.C. 2.7.-.)
- L: 585-590, 1739-1749, 1762, 2879-2887, 2927, 4040-4051, 4164
- E: 307, 504-517, 1418-1438, 2328-2341, 2420, 2885-2902, 2906, 3148(review)
- C: 221
- Transferases, transferring phosphorus containing groups (E.C. 2.7.-.), structural studies
- L: 2887
- E: 1429, 2340
- , transferring sulphur containing groups (E.C. 2.8.-.)
- L: 2875, 4029, 4039
- C: 219
- , other and uncompletely identified
- E: 2323
- , activity measurements
- L: 1401
- Triazines and triazanes
- L: 2998
- G: 1011
- P: 235, 237
- C: 1111
- Tropine alkaloids
- L: 1847, 2173, 2194, 3342, 4142
- G: 306, 1144
- P: 98, 107, 228
- C: 259, 709, 1102
- Trypsin inhibitor (antitrypsin)
- L: 1709, 2838
- E: 457, 2852
- C: 201
- Tryptophan metabolites
- L: 1492, 1500, 1514
- Tuberculostatics
- L: 4400, 4440
- Tungsten, see Cations, inorganic, analytical group IIb

U

- Uranium, see Actinides and uranium
- Urea and urea derivatives)
- L: 3839
- G: 793, 1969
- P: 474
- C: 156
- see also Thiourea
- Urethanes and polyurethanes (including pyrolysis products)
- L: 828
- G: 34, 379, 1804
- Uric acids
- L: 639, 651, 4098
- C: 719, 655, 1115
- Uricosuric drugs
- L: 2135

V

- Vanadium, see Cations, inorganic, analytical group IIb
- Vasoconstrictors
- L: 739, 873, 2045
- G: 384

Vasodilators (including coronar vasodilators)

- L: 858, 871, 2055, 2046, 2062, 2063, 3197, 4338, 4343, 4344, 4346, 4354
- G: 1224, 1827
- P: 574
- E: 1448
- C: 103, 777, 1158

Venom, snake

- L: 509-512, 515, 518-520, 591, 2809, 2810, 2812, 2814, 3974, 3976, 3977, 3979
- E: 353, 518, 522, 1402
- C: 213, 222

—, —, structural studies

- L: 3974
- E: 2812

—, other

- L: 514, 592, 954, 1547, 1669
- E: 913, 1255
- C: 1393

see also Proteins, of glands and gland products; Toxins, proteinous; individual enzyme types

Vitamins (for vitamin protein complexes, see Specific binding proteins)

- L: 719-737, 1898-1913, 3021-3046, 4185-4219
- G: 1739-1741
- P: 73-75, 242, 859-863
- E: 1968, 1969
- C: 270-273, 736, 1114-1117, 1429, 1430

—, techniques for fat soluble vitamins

- L: 1195, 3022, 3027, 3030, 3037, 4204, 4213, 4214
- P: 74
- C: 1114

—, techniques for water soluble vitamins

- L: 723, 735, 3037, 4210(review), 4213, 4214
- G: 1740
- P: 74, 859
- C: 1114, 1430

—, A group (including synthetic retinoids)

- L: 721, 731, 737, 799, 805, 1901, 1906, 3025, 3034, 3038, 3041, 3043, 3045, 3046, 4208, 4209(review), 4215, 4217
- G: 267, 273, 1050, 1167
- P: 75, 242, 559, 561, 861, 862, 891
- C: 271, 1429

see also Pigments, natural (and fluorescent substances)

Vitamins, B₁

- L: 1910, 4206, 4216
- C: 736, 1116

—, B₂ and other flavins

- L: 696, 720, 1903, 3023, 4191, 4193, 4207
- P: 69
- C: 1325

—, B₆

- L: 1890, 1900, 3042, 3236
- P: 73
- C: 1424

—, B₁₂ group (Cobalmin)

- L: 1911, 3044

—, biotin group

- L: 727, 1142, 4203(review)
- G: 1739

E: 1969

C: 1117

Vitamins, C group

- L: 728(review), 732, 1913, 2289, 3039, 4187(review), 4192, 4198, 4199, 4205

C: 270, 272, 1115

—, D group

- L: 722, 730, 734, 1904, 3026, 3028, 3032, 3033, 3035, 3036, 4194, 4196, 4212, 4218

G: 273, 328, 438, 761, 1166, 1642, 1649

Vitamins, E

- L: 724, 725, 729, 733, 919, 1912, 2643, 3040, 3043, 4185, 4186, 4189, 4190, 4195, 4201, 4202, 4211, 4549(review)

G: 1167, 1741

P: 860, 863

—, K group

- L: 719, 3024, 3031, 4197, 4200

Volatile organic compounds (VOC)

- G: 90, 129, 453, 455, 456, 459-461, 464, 469-473, 477, 479, 480, 483, 517, 619, 641, 828, 836-844, 987, 1000, 1291, 1297, 1299, 1300, 1303-1305, 1309, 1311, 1316, 1320, 1463, 1471, 1477, 1480, 1507, 1549, 1909, 1910, 1918, 1920, 1922, 1928, 1929, 1971

Volatiles, flavours, odours, see Organoleptics

W

Warefare agents

- G: 73, 514, 1165, 1722, 1736

Water

- G: 876

Water analysis and pollution

- L: 156, 192, 194, 233, 328, 356, 704, 770, 771, 773, 779-781, 785, 902, 987, 993-1003, 1036, 1051, 1057, 1066-1068, 1070, 1074, 1079, 1218, 1268, 1280, 1283, 1483, 1952, 1962, 1963, 1966, 1968, 2157, 2214-2223, 2226, 2230, 2231, 2259, 2270, 2274, 2290, 2295, 2297, 2302, 2306, 2495, 2502, 2975, 3013, 3089, 3091, 3099, 3103, 3105, 3107-3110, 3112, 3122, 3400-3404, 3410, 3413, 3415, 3430, 3436, 3438, 3462, 3463, 3466, 3470, 3474, 3475, 3617, 3631, 3642, 3763, 3813, 4244, 4250, 4253, 4258, 4270, 4273, 4276, 4284, 4510-4533, 4537, 4542, 4544, 4570, 4584, 4603, 4615, 4617, 4622, 4625
- G: 56, 133, 155, 170, 173, 174, 194, 198, 289, 290, 316, 320, 324, 354, 356, 357, 468-478, 480-482, 488, 506, 619, 649, 652, 662, 663, 665, 699, 723, 759, 769, 770, 785, 829, 830, 839-843, 863, 1020, 1022, 1025, 1039-1043, 1048, 1064, 1076, 1088, 1105, 1131, 1134, 1158, 1160, 1168, 1170, 1188, 1191, 1192, 1194, 1292, 1302-1321, 1328, 1474, 1475, 1481, 1498, 1539, 1543, 1549, 1555, 1558, 1575, 1579, 1589, 1633, 1683, 1713, 1731, 1737, 1738, 1742, 1747, 1751, 1757, 1758, 1760, 1765, 1772, 1774, 1779, 1780, 1787, 1788, 1800, 1915-1932, 1941, 1980
- P: 66, 121, 299, 300, 670, 948-950
- E: 922, 1116, 1886, 3064

- C: 117, 138, 283, 341-344, 376, 511, 512, 749, 752, 836, 839, 840, 979, 1127, 1130, 1203, 1438, 1485, 1487, 1496, 1500

see also individual polluting compounds

Water analysis and pollution, reviews

L: 1034

E: 921

C: 268, 1486

Waxes

L: 285, 2619

G: 153, 253, 492, 627, 692, 1349, 1559, 1573, 1849, 1946

XXanthine alkaloids, *see* Purine alkaloids

X-ray contrast media

L: 933

ZZinc, *see* Cations, inorganic, analytical group IIIZirconium, *see* Cations, inorganic analytical group III