

## Planar Chromatography

### 1. REVIEWS AND BOOKS

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- 3 Baranowska, I.: (Chromatographic and spectrophotometric methods used in the determination of phenols). *Chemik*, 47 (1994) 350-352; C.A., 123 (1995) 101658j - a review with 50 refs.
- 4 Jacob, J.: Method development for the determination of polycyclic aromatic hydrocarbons (PAHs) in environmental matrixes. *Tech. Instrum. Anal. Chem.*, 17 (1995) 563-589; C.A., 123 (1995) 131592a - a review with 80 refs.
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- 6 Jork, H., Funk, W., Fischer, W. and Wimmer, H.: *Thin-Layer Chromatography: Reagents and Detection Methods, Vol. 1b: Physical and Chemical Detection Methods: Activation Reactions, Reagents Sequences, Reagents II.* VCH, Weinheim, 1994, 496 p.; C.A., 123 (1995) 73707d.
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- 8 Suzuki, M.: (Optimization of mobile phase in thin-layer chromatography). *Bunseki*, (1994) 133-135; C.A., 123 (1995) 180047k - a review with 14 refs.

See also 27, 60, 69, 72, 76, 78, 91, 145, 146, 147, 186.

### 2. FUNDAMENTALS, THEORY AND GENERAL

#### 2b. Thermodynamics and theoretical relationships

- 9 Matyska, M.T., Siouffi, A.M. and Volpe, N.: Optimization of solid-phase extraction technique for a samples clean-up procedure. *Chem. Anal. (Warsaw)*, 40 (1995) 53-60; C.A., 123 (1995) 131656z.
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See also 99.

#### 2c. Relationship between structure and chromatographic behaviour

See 190.

#### 2d. Measurement of physico-chemical and related values

See 155.

### 3. GENERAL TECHNIQUES

#### 3a. Apparatus and accessories

- 11 Dzido, T.H. and Soczewinski, E.: (Method and chamber for developing simultaneously two thin-layer chromatograms). *Pol. PL 163,531 (Cl. G01N30/90)*, 29 Apr. 1994, Appl. 282,139, 02 Nov. 1989; 6 pp.; C.A., 123 (1995) 73729n.
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#### 3b. Detectors and detection reagents

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See also 2, 28, 87, 90, 160, 171, 196.

#### 3c. Sorbents and columns, packing procedures

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- See also 79, 121, 129, 200.
- 3d. *Quantitative analysis*
- See 87, 119.
- 3e. *Preparative scale chromatography*
- 23 Mo, A., Xie, Q., Wu, R., Zhang, H. and Pan, H.: (Isolation and structure elucidation of a related substance in fluconazole). *Zhongguo Yiyao Gongye Zazhi*, 26 (1995) 18-19; C.A., 122 (1995) 322654m.
- See also 116, 120, 158, 167.
- 3g. *High performance procedures*
- See 17.
4. SPECIAL TECHNIQUES
- 4a. *Automation*
- 24 Birkinshaw, F.L. and Waters, D.G.: A rapid, cost-effective approach to automated TLC method development. *J. Planar Chromatogr.*, 8 (1995) 319-323.
- 4b. *Computerization and modelling*
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- See also 10, 88, 150, 188.
- 4c. *Combination with other physico-chemical techniques (MS, IR etc.)*
- See 22, 55, 67, 69, 89.
- 4d. *Affinity chromatography (advances)*
- See 110.
- 4f. *Trace analysis and pre-separation techniques*
- See 9.
- 4g. *Enantiomers, separation*
- See 104.
- 4h. *Other special techniques*
- See 9, 16, 118, 175.
5. HYDROCARBONS AND HALOGEN DERIVATIVES
- 5b. *Cyclic hydrocarbons, fullerenes*
- 27 Gadzala, R.M. and Buszewski, B.: Properties and determination of polycyclic aromatic hydrocarbons (PAHs) using chromatographic methods. *Pol. J. Environ. Stud.*, 4 (1995) 5-15; C.A., 123 (1995) 159730t - a review with 79 refs.
- See also 4, 12.
- 5d. *Complex hydrocarbon mixtures (incl. analysis of tars, bitumens and mineral oils)*
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- See also 67, 70.
7. PHENOLS
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- See also 3, 180.

## 8. SUBSTANCES CONTAINING HETEROCYCLIC OXYGEN

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## 8b. Aflatoxins and other mycotoxins

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## 8c. Other compounds with heterocyclic oxygen (incl. tannins)

See 26, 183, 191.

## 9. OXO COMPOUNDS, ETHERS, EPOXIDES AND QUINONES

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See also 156, 164, 178, 182.

## 10. CARBOHYDRATES

## 10a. Mono and oligosaccharides. Structural studies

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See also 33.

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See also 55.

## 11. ORGANIC ACIDS AND LIPIDS

## 11a. Organic acids and simple esters

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See also 14, 52, 53, 60, 78, 154.

## 11b. Prostaglandins

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- 11d. *Lipoproteins and their constituents*
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13. STEROIDS
- 13a. *General techniques*
- 88 Cai, H. and Sun, Y.: (A database of thin-layer chromatographic analysis for steroids). *Sepu*, 13 (1995) 279-280; *C.A.*, 123 (1995) 179605j.
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- See 89.
14. STEROID GLYCOSIDES AND SAPONINS
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15. TERPENES AND OTHER VOLATILE AROMATIC COMPOUNDS
- 15a. *Terpenes*
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### 33. CLINICO-CHEMICAL APPLICATIONS

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

See 39, 48, 59, 62, 171, 174.

### 34. FOOD ANALYSIS

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See 31, 36, 58, 67, 81, 191.

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

See 186.

### 35. ENVIRONMENTAL ANALYSIS

#### 35a. General papers and reviews

See 4.

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

- 187 Moeller, K. and Sieber, M.: TLC in water analysis. *GIT Spez. Chromatogr.*, 14, No. 2 (1994) 81-84; C.A., 123 (1995) 178909z.
- 188 Stan, H.J. and Butz, S.: Multimethod applying AMD-TLC analysis to drinking water. *Chem. Plant Prot.*, 12 (1995) 197-216; C.A., 123 (1995) 152350k.

See also 29.

### 36. SOME TECHNICAL PRODUCTS AND COMPLEX MIXTURES

#### 36a. Surfactants

- 189 Bosdorf, V., Bluhm, T. and Kruesmann, H.: Rapid thin-layer chromatographic method for determination of adsorbed non-ionic surfactants on fabrics. *Melliand Textiber.*, 75 (1994) 311-312; C.A., 123 (1995) 58621c.
- 190 Cserhati, T. and Forgacs, E.: Use of canonical correlation analysis for the evaluation of chromatographic retention data. *Chemom. Intell. Lab. Syst.*, 28 (1995) 305-313; C.A., 123 (1995) 147395z.

#### 36b. Antioxidants and preservatives

- 191 Echterhoff, A.M. and Petz, M.: (HPTLC-method for the determination of residues of nitrofurans in eggs and milk). *Dtsch. Lebensm.-Rundsch.*, 90 (1994) 341-344; C.A., 123 (1995) 31512f.

See also 128.

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

- 192 Kreuzig, F.: Rapid fluorimetric HPTLC method for the quantitative determination of rape seed oil in fermentation broth. *J. Planar Chromatogr.*, 8 (1995) 284-287.

## 37. CELLS, CELLULAR PARTICLES AND SUPRAMOLECULAR STRUCTURES

- 193 Field, F.J., Born, E., Chen, M., Murthy, S. and Mathur, S.N.: Esterification of plasma membrane cholesterol and triacylglycerol-rich lipoprotein secretion in CaCo-2 cells: possible role of *p*-glycoprotein. *J. Lipid Res.*, 36 (1995) 1533-1543.
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See also 86.

## 38. INORGANIC COMPOUNDS

38a. *Cations*

- 197 Li, H., You, J., Li, F., Tian, J. and Liu, C.: (Thin-layer chromatography and ultraviolet spectra of cobalt(II), copper(II), zinc(II), lead(II), manganese(II) and nickel(II) as their glyoxylic acid thiosemicarbazone complexes). *Sepu*, 13 (1995) 203-204; C.A., 123 (1995) 217123k.

- 198 Li, H., You, J., Tian, L., Liu, S., Ding, Y. and Li, F.: (Synthesis and study on the thin-layer chromatography and ultraviolet spectrum of N-salicylideneamino acid-transition metal complexes). *Fenxi Huaxue*, 23 (1995) 911-914; C.A., 123 (1995) 216926n.
- 199 Mohammad, A.: Separation of nickel from cobalt as its chlorosulfate on silica gel layer with solvents containing formic acid. *Indian J. Chem. Technol.*, 2 (1995) 233-235; C.A., 123 (1995) 187077d.
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- 201 Spangenberg, B., Stehle, S. and Stroebel, C.: Quantitative TLC by a handscanner. Co<sup>2+</sup> determination. *GIT Fachz. Lab.*, 39 (1995) 461-464; C.A., 123 (1995) 187192n.
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See also 1.

38b. *Anions*

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## 39. RADIOACTIVE AND OTHER ISOTOPE COMPOUNDS

See 172.