

Planar Chromatography

1. REVIEWS AND BOOKS

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- 364 Sharma, J.: Thin layer chromatography in environmental analysis. *Rev. Anal. Chem.*, 14 (1995) 75-142; C.A., 124 (1996) 75082r - a review with many refs.

See also 383.

2. FUNDAMENTALS, THEORY AND GENERAL

2a. General

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2b. Thermodynamics and theoretical relationships

- 368 Kowalska, T., Podgorny, A. and Pinkawa, A.: Quantification of adsorption and partition in the mixed LC mechanism of retention. *J. Planar Chromatogr.*, 8 (1995) 420-426.

2c. Relationship between structure and chromatographic behaviour

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2d. Measurement of physico-chemical and related values

See 497.

3. GENERAL TECHNIQUES

3b. Detectors and detection reagents

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- 375 Navas Diaz, A., Garcia Sanchez, F. and Gonzalez Garcia, J.A.: Thin-layer chromatography with chemiluminescent detection of enhancers of the luminol-H₂O₂-peroxidase system. *J. Chromatogr. A*, 724 (1996) 411-415.
- 376 Troschuetz, R. and Heinemann, O.: On the fluorescence reaction of pharmaceutically important o-aminobenzamides and o-aminobenzenesulfonamides with phthalaldehyde and analogs. *Arch. Pharm. (Weinheim)*, 328 (1995) 759-764; C.A., 124 (1996) 156210h.

See also 384, 444, 485.

3c. Sorbents and columns, packing procedures

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See also 382, 482, 521.

4. SPECIAL TECHNIQUES

4a. Automation

See 394.

4c. Combination with other physico-chemical techniques (MS, IR etc.)

- 379 Kobayashi, T.: (Thin-layer chromatography mass spectrometry for separation and qualitative analysis of mixture). *Jpn. Kokai Tokkyo Koho* JP 07,209,252 [95,209,252] (Cl. G01N27/62), 11 Aug. 1995, Appl. 94/23,495, 26 Jan. 1994; 4 pp.; C.A., 123 (1995) 358028v.
- 380 Redeker, J.: UV-transparent chromatographic development chambers. *Ger. Offen.* DE 4,408,172 (Cl. G01N30/94), 14 Sep. 1995, Appl. 11 Mar. 1994; 9 pp.; C.A., 123 (1995) 357964k.
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See also 415, 465, 469.

4g. Enantiomers, separation

- 382 Lepri, L.: Reversed phase planar chromatography of enantio-meric compounds on microcrystalline triacetylcellulose. *J. Planar Chromatogr.*, 8 (1995) 467-469.

See also 460.

4h. Other special techniques

See 474, 525.

5. HYDROCARBONS AND HALOGEN DERIVATIVES

5b. Cyclic hydrocarbons, fullerenes

- 383 Biggs, W.R. and Fetzer, J.C.: Analytical techniques for large polycyclic aromatic hydrocarbons: a review. *TrAC*, 15 (1996) 196-206.

See also 369, 391.

5d. Complex hydrocarbon mixtures (incl. analysis of tars, bitumens and mineral oils)

- 384 Cebolla, V.L., Vela, J., Membrado, L. and Ferrando, A.C.: Coal-tar pitch characterization by thin-layer chromatography with flame ionization detection. *Chromatographia*, 42 (1996) 295-299.
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6. ALCOHOLS

See 391.

7. PHENOLS

- 386 Fischer, W., Bund, O. and Hauck, H.E.: Thin-layer chromatographic analysis of phenols on TLC aluminium sheets RP-18 F_{254s}. *Fresenius J. Anal. Chem.*, 354 (1996) 889-891.

See also 370, 374, 375, 517.

8. SUBSTANCES CONTAINING HETEROCYCLIC OXYGEN

8a. Flavonoids

- 387 Nagy, M. and Grancai, D.: Colorimetric determination of flavanones in propolis. *Pharmazie*, 51 (1996) 100-101.

8b. Aflatoxins and other mycotoxins

- 388 Dawlatana, M., Coker, R.D., Nahler, M.J. and Blunden, G.: A normal phase HPTLC method for the quantitation determination of oxchratoxin A in rice. *Chromatographia*, 42 (1996) 25-28.

- 389 Oubrahim, H., Cantin-Esnault, D. and Richard, J.-M.: Novel methods for identification and quantitation of the mushroom nephrotoxin orellanine. *Pharmazie*, 51 (1996) 231-234.

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

See 375.

9. OXO COMPOUNDS, ETHERS, EPOXIDES AND QUINONES

- 390 Ashraf, C.M. and Waheed, S.: Determination of carbonyls in natural and other products. *J. Chem. Soc. Pak.*, 17 (1995) 43-60; C.A., 124 (1996) 75083s.

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See also 478, 501.

10. CARBOHYDRATES

10a. Mono and oligosaccharides. Structural studies

- 394 Brandolini, V., Menziani, E., Mazzotta, D., Cabras, P., Tosi, B. and Lodi, G.: Use of AMD-HPTLC for carbohydrate monitoring in beers. *J. Food Compos. Anal.*, 8 (1995) 336-343; C.A., 124 (1996) 144189v.

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See also 508.

10b. Polysaccharides, mucopolysaccharides, lipopolysaccharides

See 395.

11. ORGANIC ACIDS AND LIPIDS

11a. Organic acids and simple esters

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See also 495, 509, 517.

11c. Lipids and their constituents

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See also 509.

12. ORGANIC PEROXIDES

See 407.

13. STEROIDS

13b. *Pregnane and androstane derivatives*

- 430 Eisen, C., Meyer, C., Dressendorfer, R., Strasburger, C., Decker, H. and Wehling, M.: Binding-labelled photoactivatable aldosterone and progesterone derivatives as ligands for affinity chromatography, fluorescence immunoassays and photoaffinity labelling. *Eur. J. Biochem.*, 237 (1996) 514-518.

13c. *Estrogens*

See 431.

13d. *Sterols*

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See also 517.

13e. *Bile acids and alcohols*

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See also 432.

14. STEROID GLYCOSIDES AND SAPONINS

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See also 505.

15. TERPENES AND OTHER VOLATILE AROMATIC COMPOUNDS

15b. Essential oils

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16. NITRO AND NITROSO COMPOUNDS

See 512.

17. AMINES, AMIDES AND RELATED NITROGEN COMPOUNDS

17a. Amines and polyamines

- 440 Ziegler, D.M. and Poulsen, L.L.: Estimation of tissue cysteamine by quantitative thin-layer chromatography. *Methods Enzymol.*, 251 (1995) 294-299; C.A., 124 (1996) 25011w.

See also 376.

17b. Catecholamines and their metabolites

See 444.

17d. Other amine derivatives and amides (excl. peptides)

- 441 Weber, H. and Bresser, R.: Oxalsäurehydrazide als hydrolytisch labile Oxidationsprodukte der Pyrazolinon-Analgetika. *Pharmazie*, 51 (1996) 152-155.

18. AMINO ACIDS AND PEPTIDES; CHEMICAL STRUCTURE OF PROTEINS

18a. Amino acids and their derivatives

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See also 462, 474.

18b. Peptides, peptidic and proteinous hormones, growth factors

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20. ENZYMES AND ENZYME ACTIVITY ESTIMATION

20a. Oxidoreductases

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21. PURINES, PYRIMIDINES, NUCLEIC ACIDS AND THEIR CONSTITUENTS

21a. Purines, pyrimidines, nucleosides, nucleotides

- 453 Li, D., Wang, M., Dhingra, K. and Hittelman, W.N.: Aromatic DNA adducts in adjacent tissues of breast cancer patients: clues to breast cancer etiology. *Cancer Res.*, 56 (1996) 287-293.
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21c. Nucleic acids, DNA

- 459 Mauthe, R.J., Marsch, G.A. and Turteltaub, K.W.: Improved high-performance liquid chromatography analysis of 32 P-postlabeled 2-amino-1-methyl-6-phenylimidazo[4,5-b]pyridine-DNA adducts using in-line precolumn purification. *J. Chromatogr. B*, 679 (1996) 91-101.

22. ALKALOIDS

- 460 Drandaraov, K. and Hais, I.M.: Separation of E-Z isomeric macrocyclic spermine alkaloids of *Verbascum pseudonobile* and *Verbascum phoeniceum* and of their derivatives using thin-layer chromatography. *J. Chromatogr. A*, 724 (1996) 416-423.
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- 33b. Complex mixtures and profiling (single compounds by cross-reference only)

See 396, 408, 422.

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

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- 35a. General papers and reviews

See 364.

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See 520.

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