

Planar Chromatography

1. REVIEWS AND BOOKS

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- 527 Draghici, C., Gocan, S. and Coman, G.: Chiral Chromatography. *Bull. Transilvania Univ. Brasov, Ser. B*, 1 (1994) 79-84; C.A., 124 (1996) 192845c - a review with 19 refs.
- 528 Ebel, S.: Quantitative analysis in TLC and HPTLC. *J. Planar Chromatogr.*, 9 (1996) 4-15 - a review with 49 refs.
- 529 Muralidharan, D. and Rao, V.S.S.: Planar chromatographic analysis of leather dyes - a review. *J. Soc. Leather Technol. Chem.*, 79 (1995) 178-180; C.A., 124 (1996) 277315e - a review with 23 refs.
- 530 Oka, H.: (Application of thin layer chromatography/fast atom bombardment mass spectrometry (FABMS) to food analysis). *Bunseki*, (1996) 100-107; C.A., 124 (1996) 315199e.
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- 532 Sherma, J.: Planar chromatography. *Anal. Chem.*, 68 (1996) 1R-19R - a review with 517 refs.
- 533 Shukla, V.K.S.: Thin-layer chromatography of lipids. In: Sebedio, J.-L. and Perkins, E.G. (Editors), *New Trends Lipid Lipoprotein Anal.*, [Proc. Int. Symp.], 1993, AOCS Press, Champaign, 1995, pp. 17-23; C.A., 124 (1996) 311433d.
- 534 Volynets, M.P. and Myasoedov, B.F.: Application of thin-layer chromatography in quantitative inorganic analysis and in radiochemical studies. *Crit. Rec. Anal. Chem.*, 25 (1996) 247-312; C.A., 124 (1996) 248834t - a review with 473 refs.
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See also 680, 682, 683, 744.

2. FUNDAMENTALS, THEORY AND GENERAL

2a. General

- 536 Klama, B. and Kowalska, T.: A comparison of retention mechanisms in adsorption TLC on alumina and silica with aliphatic alcohol-n-hexane eluents. *J. Planar Chromatogr.*, 9 (1996) 25-30.
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- 538 Prus, W. and Kowalska, T.: The applicability of selected models of solute retention to RP-TLC systems complicated by the effect of adsorption. *J. Planar Chromatogr.*, 9 (1996) 164-173.

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2b. Thermodynamics and theoretical relationships

541 Janjic, T.J., Vuckovic, G. and Celap, M.B.: Linear interdependence for R_M pair values of substances in salting-out planar chromatography. *Chromatographia*, 42 (1996) 675-679.

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2c. Relationship between structure and chromatographic behaviour

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See also 531.

3. GENERAL TECHNIQUES

3b. Detectors and detection reagents

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- See also 603, 614, 759.
- 3c. *Sorbents and columns, packing procedures*
- 549 Buzaev, V.V., Berezkin, V.G. and Koshevnikov, M.A.: (Thin-layer chromatographic plate and process of its manufacture). U.S.S.R. SU 1,394,916 (Cl. G01N30/92), 20 Aug. 1995, Appl. 4,124,686, 29 Sep. 1986; C.A., 124 (1996) 192792h.
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- See also 643, 660.
- 3d. *Quantitative analysis*
- 552 Prosek, M., Golc-Wondra, A. and Smidovnik, A.: Quantitative thin-layer chromatography. Part XIII. Identification of residues on of diffusely reflecting layers. *J. Planar Chromatogr.*, 9 (1996) 178-180.
- See also 528, 628, 710.
- 3e. *Preparative scale chromatography*
- See 559, 565, 711.
- 3f. *Programmed temperature, pressure, vapors, gradients*
- See 570.
- 3g. *High performance procedures*
- See 578, 624.
4. **SPECIAL TECHNIQUES**
- 4a. *Automation*
- See 527.
- 4b. *Computerization and modelling*
- See 526, 542, 548.
- 4c. *Combination with other physico-chemical techniques (MS, IR etc.)*
- 553 Caudin, J.P., Beljebar, A., Sockalingum, G.D., Angiboust, J.F. and Manfait, M.: Coupling FT Raman and FT SERS microscopy with TLC plates for *in situ* identification of chemical compounds. *Spectrochim. Acta, Part A*, 51A (1995) 1977-1983; C.A., 124 (1996) 192911w.
- See also 530, 535, 548, 562, 563, 586, 592, 599, 654, 657, 688, 721, 747, 755.
- 4g. *Enantiomers, separation*
- See 640.
- 4h. *Other special techniques*
- 554 Altman, A.R.: The production, analysis and application of a self-generating mobile phase pH gradient in thin-layer chromatography. Avail. *Univ. Microfilms Int.*, Order No. DA9521246, 1995, pp. 121; C.A., 123 (1995) 305348t.
- See also 597, 623.
5. **HYDROCARBONS AND HALOGEN DERIVATIVES**
- 5b. *Cyclic hydrocarbons, fullerenes*
- 555 Cebolla, V.L., Membrado, L., Vela, J. and Andres, J.M.: Thin-layer chromatography with flame ionization detection in the characterization of pitches. *Coal Sci. Technol.*, 24 (Coal Science, Vol. 1) (1995) 953-956; C.A., 124 (1996) 180773q.
- See also 556, 564.
- 5c. *Halogen derivatives*
- 556 Srcic, S., Kerc, J., Pukl, M., Kmetec, V. and Planinsek, O.: Relative lipophilicities of some 1,4-dihydropyridine calcium antagonists. In: *World Meet. Pharm., Biopharm. Technol., 1st 1995*, AGPI, Chatenay Molabry, 1995, pp. 30-31; C.A., 124 (1996) 241931p.
- 5d. *Complex hydrocarbon mixtures (incl. analysis of tars, bitumens and mineral oils)*
- 557 Barman, B.N.: Hydrocarbon-type analysis of base oils and other heavy distillates by thin-layer chromatography with flame-ionization detection and by the Clay-gel method. *J. Chromatogr. Sci.*, 34 (1996) 219-225.
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See also 555.

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See also 537, 746.

7. PHENOLS

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See also 543.

8. SUBSTANCES CONTAINING HETERO CYCLIC OXYGEN

8a. Flavonoids

- 565 Bucar, F., Schubert-Zsilavecz, M. and Knauder, E.: Flavonoids of *Guiera senegalensis*. *Pharmazie*, 51 (1996) 517-518.
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8b. Aflatoxins and other mycotoxins

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

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See also 569, 638.

9. OXO COMPOUNDS, ETHERS, EPOXIDES AND QUINONES

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See also 733.

10. CARBOHYDRATES

10a. Mono and oligosaccharides. Structural studies

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10b. Polysaccharides, mucopolysaccharides, lipopolysaccharides

See 562, 581.

11. ORGANIC ACIDS AND LIPIDS

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See also 542, 636, 669, 675, 690.

11b. Prostaglandins

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See also 533, 721.

13. STEROIDS

13a. *Pregnane and androstane derivatives*

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13c. *Estrogens*

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13d. *Sterols*

See 636, 661.

13e. *Bile acids and alcohols*

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See 596.

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See also 611.

19. PROTEINS

19a. General techniques

See 646.

19b. Proteins of cells, viruses and subcellular particles

See 650.

19i. Proteins of glands, gland products, various zymogens (incl. milk proteins)

See 651.

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33. CLINICO-CHEMICAL APPLICATIONS
- 33b. *Complex mixtures and profiling (single compounds by cross-reference only)*
- See 584, 603, 656, 675, 681.
34. FOOD ANALYSIS
- 34b. *Complex mixtures (single compounds by cross-reference only)*
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